TRADE AND INDUSTRY

29 July 1971 Volume 4 No 4 10p

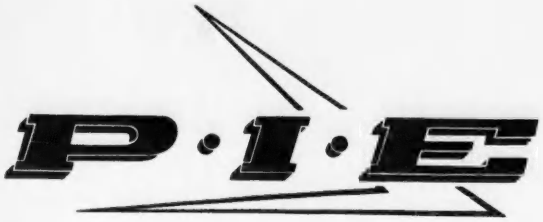
Exporting to Canada—2: British Columbia—A market on the grand scale

EEC negotiations: Tariff treatment of industrial materials

Industrial building in second quarter of 1971—IDC approvals

Big business in Japanese department store promotions

'New Technology' looks at machinery noise, holography in engineering and industrial fuel efficiency



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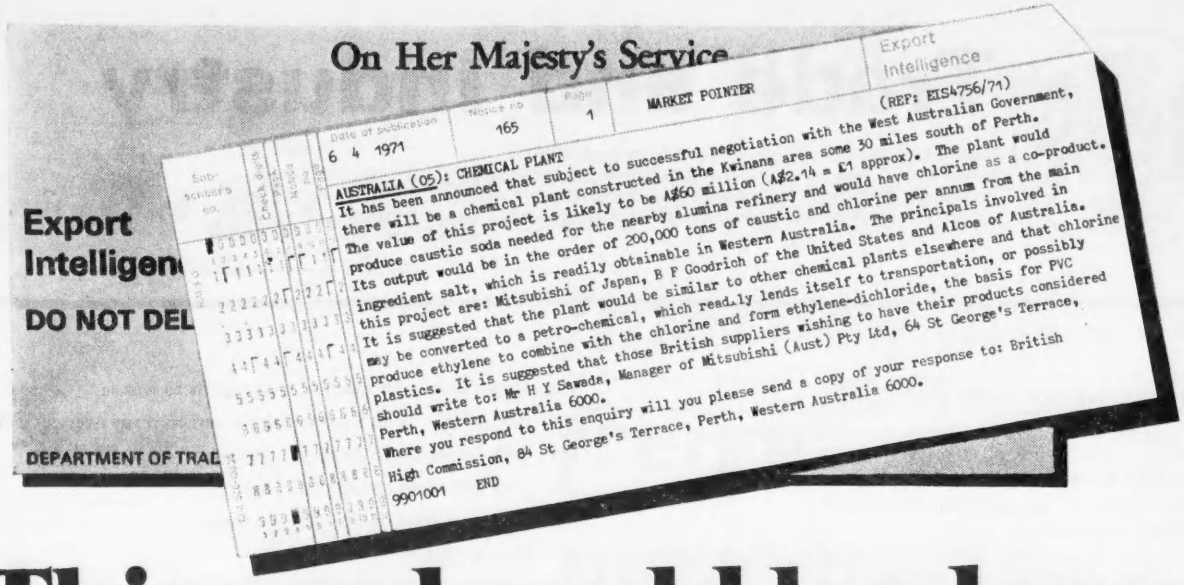
On Her Majesty's Service
Export Intelligence
MARKET POINTER
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Notice no.
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Page
1
(REF: EIS4756/71)
AUSTRALIA (05): CHEMICAL PLANT
It has been announced that subject to successful negotiation with the West Australian Government, there will be a chemical plant constructed in the Kwinana area some 30 miles south of Perth. The value of this project is likely to be A$60 million (A$2.14 = £1 approx). The plant would produce caustic soda needed for the nearby alumina refinery and would have chlorine as a co-product. Its output would be in the order of 200,000 tons of caustic and chlorine per annum from the main ingredient salt, which is readily obtainable in Western Australia. The principals involved in this project are: Mitsubishi of Japan, B F Goodrich of the United States and Alcoa of Australia. It is suggested that the plant would be similar to other chemical plants elsewhere and that chlorine may be converted to a petro-chemical, which readily lends itself to transportation, or possibly produce ethylene to combine with the chlorine and form ethylene-dichloride, the basis for PVC plastics. It is suggested that those British suppliers wishing to have their products considered should write to: Mr H Y Sawada, Manager of Mitsubishi (Aust) Pty Ltd, 64 St George's Terrace, Perth, Western Australia 6000.
Where you respond to this enquiry will you please send a copy of your response to: British High Commission, 84 St George's Terrace, Perth, Western Australia 6000.
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British Columbia: a market on a grand scale

by C. C. Clemens MC, Principal British Trade Commissioner, British Columbia

THE PROVINCE of British Columbia, which this year celebrates the centenary of its accession to the Confederation of Canada, has come a long way since 1871 and seems poised and ready for a further period of dynamic expansion. The Province offers a market on the grand scale. Comparisons are notoriously odious and statistics mendacious, but it is useful to quote a few figures to put the size of the Province and its economy in perspective. With an area of 366,255 sq. m. British Columbia is larger than France, the German Federal Republic, Belgium, The Netherlands and Luxembourg put together. Its population of over 2-million (estimated at 2,187,000 in 1970), over half of whom are concentrated in the Greater Vancouver-Greater Victoria areas, enjoys a standard of living rarely surpassed in the western world. The gross Provincial product in 1970 was estimated by the Provincial Government at $9,250-million or over $4,200 per head of population. (The Swedish figure, for example, is $3,500 (US) *per capita* which, even allowing for possible differences in methods of calculation, gives some measure of the wealth of this Province.)

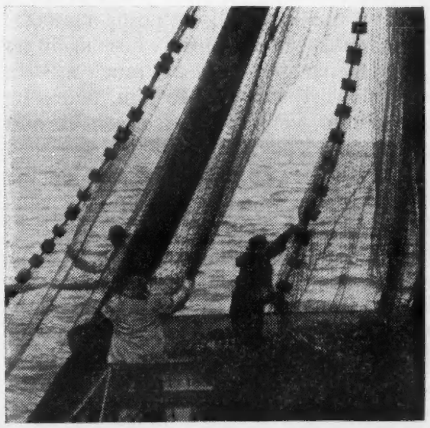
Like the rest of Canada, British Columbia has suffered over the past year a check to industrial and commercial activity aggravated in 1970 by a series of strikes. Recovery has been somewhat slower than was hoped towards the end of last year but there are now some signs that it may be getting under way. The wealth of natural resources on which the economy depends is so great that it could easily get into high gear again very quickly. Confidence in its future is, incidentally, illustrated by the attention paid by Japanese interests to British Columbia not only as a source of raw materials but as an important market, one which is used as a testing ground and springboard for penetration of Canada as a whole.

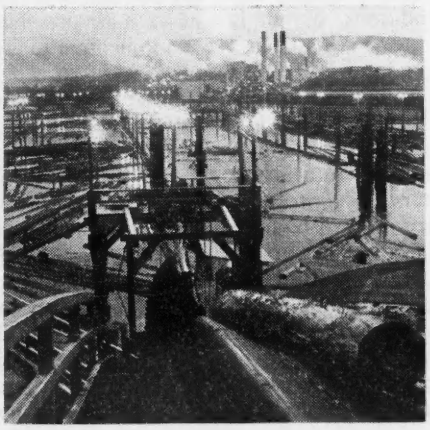
Catering for leisure pursuits

Not least of the Province's natural resources is its magnificent scenery. This may in passing be offered to British exporters as an incentive to come and see the market for themselves. But it is of importance to them in more ways than that. The natural beauty of the Province and its temperate coastal climate, together with its position on the tourist route between the United States and Alaska and on the Pacific cruise circuit, all attract an influx of visitors who substantially broaden the base of the market for consumer goods and indeed for hotel equipment. Tourists from east of the Rockies and from abroad, mainly the United States, are estimated by the Tourist Bureau at between two and five million annually. A more

Right: Jervis Inlet, British Columbia. The province's magnificent natural resources have resulted in an important tourist industry and profitable openings exist for British manufacturers of products for sport, camping and other outdoor leisure pursuits.

Below (left to right): Fishing, pulp and paper, and mining are three of the resource-based industries in British Columbia on which the province's economy largely depends. These industries—as well as logging and hydro-electric power generation—are also the largest markets for British exporters.





accurate count is possible in the case of foreign passenger vehicles entering British Columbia from the United States which amounted to one million in 1969, about half of them remaining for one night or more. Visitors from the United States in particular come disposed to look for something British in a city like Victoria where the Union Jack is more frequently on display even than in London.

Many British exporters do excellent business across the whole field of consumer goods, but there is one area which could perhaps profitably be given more attention. This is the whole range of products catering for leisure pursuits. British Columbia enjoys both an abundance of lakes and some of the best sheltered ocean cruising grounds in the world with the result that in this area owning a boat (whether cartop type, trailed or berthed at one of the numerous marinas) is almost as common as owning a second car. Apart from water sports, British Columbia caters for hunting, fishing, skiing, hiking, climbing, camping and caravanning and indeed for virtually every outdoor sport—even cricket. All these offer markets which could be of interest to British exporters.

Given the importance of tourism it is not surprising that there is a growing awareness that even in this vast territory the resources of water and unspoiled country are not inexhaustible. The question of pollution and its control is one which has caught the public imagination. Progressively tightening Provincial regulations on water and air pollution will encourage and accelerate the process under which industry and the municipalities are already planning to spend in the next few years millions of dollars on plant for the control of industrial effluent and domestic sewage. A significant proportion of this will be spent on equipment which could be supplied from the UK.

The backbone of the economy

It is, however, the resources-based industries which provide the backbone of the economy and the biggest opportunities for British exporters. The fishing industry comprises over 7,000 boats of a total gross tonnage of 80,000 valued at over $100-million, and although these, like the 400 odd towboats mainly serving the coastwise operations of the logging industry, are for the most part built in local yards, there are openings for British suppliers of propulsion units and marine equipment generally. There are over 20 operating pulp and paper mills and more than 30 operating mines (nearly 40 if one counts the Yukon, for which the Vancouver-based rail-sea service of the White Pass & Yukon Route provides a major artery.) Some measure of the rate of industrial growth is given by the steady increase in the output of electric power (mainly hydro) which in 1969 at over 26-million kilowatt hours was nearly double that of 1961. After a flattening out in 1970 which reflected the economic conditions, output is again climbing.

It is frequently said that over 50 cents in every dollar spent in British Columbia derives directly or indirectly from the forest products industries. These are still the most important factor in the economy but there is little doubt that mining is the growth industry of the immediate future and offers the best prospects for British exporters. In contrast to the rest of the economy, the mining industry in 1970 had the best year in its history. Resurgence is based largely on the development of open pit mining operations on a scale large enough to permit profitable working of relatively low grade ores, and similar methods are being employed in the first of the big coal mining projects, though others at the planning stage may adopt underground working. Many of the projects depend on long-term contracts with Japanese interests. The most important of these relate to coking coal and copper concentrates, but there is important production, actual and impending, of other minerals including molybdenum, silver, cadmium, lead and zinc. Capital sums committed to new mining projects under way or those firmly planned amount to nearly $500-million, and other schemes still at a preliminary planning stage could increase total investment by a further $500-million during the next 5 or 6 years. The very large earth-moving equipment used in the open pit operations may not be of interest to British firms but there should be numerous opportunities for them to supply equipment for bulk materials handling and for concentrators or coal preparation plants. The growing output of the mines will also generate a demand for additional port facilities.

Canada's third largest city, Vancouver, is shown here with Mt. Seymour and Grouse Mountain in the background.

Presence felt

It is important to remember that in many respects British Columbia needs to be considered as a separate market. Though crossed by good roads and railways, the Rocky Mountains still constitute a barrier between the Province and the rest of the country and freight is usually cheaper from the UK to Vancouver via the Panama Canal than from Eastern Canada. It is about as far again from Toronto to Vancouver as it is from London to Toronto. It is most important for British firms who wish to export to this market to make their presence felt on the spot. A purchasing manager is not inclined to give much attention to a firm whose agent he never sees; an engineering manager will not put much trust in a piece of machinery, particularly one new to him, unless he is sure of being able to obtain technical advice, service and spares quickly in case of need.

One final point. Not only is the market a good one but the word 'British' in the name of the Province has by no means lost its significance. There is a large reservoir of goodwill ready to be tapped in the great numbers of people in commerce and industry, as indeed in all walks of life, who have either themselves emigrated from Britain or whose family connections are still close. No sales will be made on goodwill alone, but any British exporters who can offer a competitive British product and, above all, reliable delivery and service can be sure of a good reception in this market.

Car industry benefits in Chancellor's package

—Sir John Eden

THE MOTOR INDUSTRY should be one of the main beneficiaries from the measures to stimulate the economy announced by the Chancellor of the Exchequer, said Sir John Eden, Minister for Industry, when he launched the one millionth Vauxhall Viva at the company's Luton works on July 20.

'It is often the case that the situation in the motor industry mirrors that of the country as a whole. When we have inflation, slow growth, disrupted production and low profitability in the economy generally, we can expect to find them also in the motor industry.

'It is not really surprising—because the motor industry is such an important part of our economy. And it means also that when we have a more flourishing economy—the sort of dynamic economy we all want to see—then we can expect to see a more flourishing motor industry with scope for growing sales, growing productivity, higher real wages and more prosperity all round. It is to achieve just this that the Chancellor, in giving further stimulus to the economy, has announced the abolition of controls on hire purchase and credit terms and also on 18 per cent reduction in purchase tax. The motor car industry should be one of the main beneficiaries from these measures.

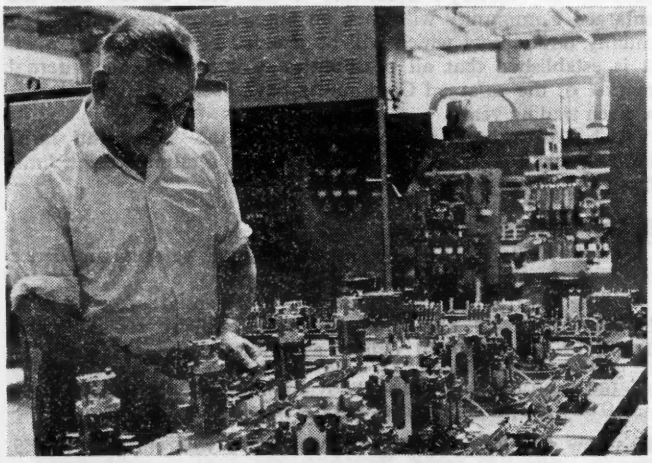
Sir John added: 'The link between the motor industry and the economy as a whole means too that the solution to our national problems and to those of the industry or of firms within it are very similar to each other.

'We must regain for Britain a reputation for reliability, quality and prompt delivery of our products. We must change our ways and develop our skills to meet the demands of a changing world. We must above all have confidence in ourselves and in our achievements to go on and press still further ahead in the future. With Britain in the Common Market, it would be all the more important to make the most of our national skills. Europe offers a challenge to us and without doubt a stiff one. But by meeting that challenge which I am sure we can do—we shall open up for ourselves immense opportunities.'

Clearance of merger proposals by the DTI

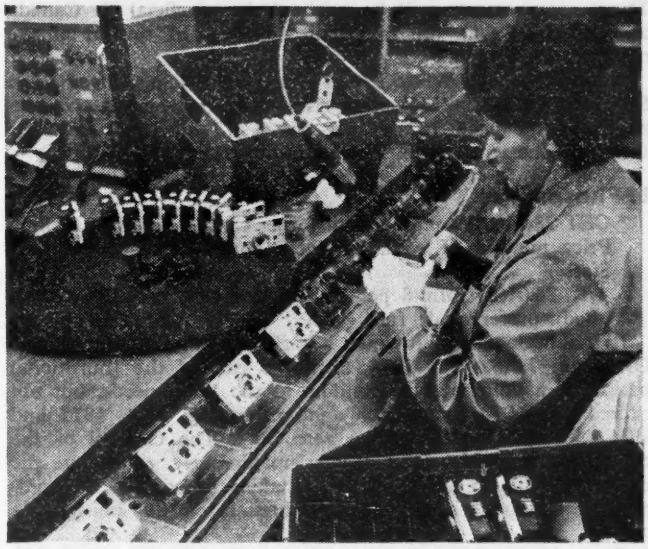
THE DEPARTMENT of Trade and Industry announce that on the information at present before them it is not their intention to refer to the Monopolies Commission, under the provisions of the Monopolies and Mergers Act 1965, the proposed merger between the following companies:

Tozer Kemsley & Millbourn (Holdings) Ltd.
and Price and Pierce (Holding Company) Ltd.



Allen West-EAC's factory on the edge of Oulton Broad, Lowestoft, is exporting its Autoswitch Starters throughout the world. Regular consignments are sent to EEC countries, particularly Germany, to Australia, New Zealand, Pakistan and Zambia, as well as South Africa, Kuwait, Kenya and some of the smaller African countries. Picture shows Mr. Tom Horrex, Allen West-EAC fitter wireman working on an Autoswitch consignment intended for Germany.

Sir John Eden, Minister for Industry, drives the millionth Vauxhall Viva from the production line on July 20. His passenger is Mr. A. D. Rhea, chairman and managing director of Vauxhall Motors Ltd.



This week sees the production of the 10 millionth British-made 'Instamatic' still camera at the Kodak Ltd. factory in Stevenage, Hertfordshire. Since their introduction in 1963 over 50 per cent of Kodak's production of the cameras has been exported. As a result the company has received a message of congratulation from Mr. Michael Noble, the Minister for Trade, praising Kodak's achievement in gaining much valuable foreign currency for the country. 'The cameras have gone to many overseas countries,' said Mr. Noble, 'and I am particularly impressed to see that these have included such tough markets as Japan.'

Official appointments

THE SECRETARY of State for Trade and Industry has authorised the following appointments:

Alderman J. W. Pass, of Swindon, to be a member of the Southern Electricity Consultative Council; Mr. C. J. Howell, of Alton, to be a member of the London Electricity Consultative Council.

Mr. K. G. Holden to be re-appointed as a part-time member of the North Western Gas Board and Viscount Monck to be re-appointed as a part-time member of the Southern Gas Board.

Mr. Christopher Dolley to be a member of the National Film Finance Corporation in succession to Mr. Harry Smith who has resigned.

Mr. D. McGarvey, President of the Amalgamated Society of Boilermakers, Shipwrights, Blacksmiths and Structural Workers, to be a member of the Iron and Steel Consumers' Council.

Councillor R. B. Hewlett to be a member of the South Western Gas Consultative Council; and of Mr. D. J. George, to be a member of the North Western Gas Consultative Council.

UK/EEC Negotiations: Details of arrangements for tariff treatment of industrial materials

DUTIES ON MOST industrial materials are zero in both the UK tariff and the Common External Tariff (CET) of the Community, but there are a number of items of particular importance to British industry which are dutiable under the CET. During the negotiations the Government has sought to ensure that our membership of the Community will not lead to a new charge on supplies of these materials.

In some cases, after careful examination, it was concluded that the enlarged Community would be self-sufficient. For the rest, arrangements were agreed which will ensure that about 90 per cent of our imports of these materials from outside the enlarged Community will continue to be imported free of duty. These arrangements will be particularly beneficial to Canada and Australia who are important suppliers of several of the materials concerned.

Annex B of the White Paper 'The United Kingdom and the European Communities' summarising the arrangements was reproduced on page 122 of last week's *Trade and Industry*. Details of the arrangements are set out below:

1. Phosphorus

* CET 28.04(C)IV 9.6 per cent (6 per cent if American Selling Price method of valuation were abolished by the United States)

UK 28.04(B) mfn 8 per cent (5 per cent if ASP is abolished); preferential: free

It has been agreed to open a tariff quota in favour of the UK from January 1, 1974, until the end of the transitional period of a volume corresponding to the UK's needs, but not exceeding 40,000 tonnes per annum. During 1974, 1975 and 1976, this quota will carry a zero duty. The Council of the enlarged Community may decide, unanimously, to change the duty applicable to this tariff quota, taking account of the competition situation, supply and production on the phosphorus market.

For 1977, the Council of the enlarged Community will decide, unanimously, on the duty which this tariff quota is to carry. If no decision is taken by the Council, the quota will carry a duty equal to half of the CET duty.

From January 1, 1978, the CET will be applied in full. The UK will apply, from April 1, 1973, a zero duty in respect of imports from the present Member States of the Community.

While agreeing this solution, the possibility was taken into account, which is open to all Member States of the enlarged Community, to request, if necessary, application of Article 28 of the Treaty of Rome with a view to taking the appropriate tariff measures.

2. Unwrought aluminium

CET 76.01(A) 9 per cent

UK 76.01(A) alloys mfn: 5 per cent; preferential: free

(B) other mfn: 3 per cent; preferential: free

As from January 1, 1971, the CET has been reduced from 9 per cent to 7 per cent, and the Community tariff quota abolished.

3. Silicon carbide

CET 28.56(A) 8.6 per cent (8 per cent if ASP were abolished).

UK 28.56(B) mfn: free; preferential: free

It has been agreed that no derogation from the CET is necessary, given the prospects of enlargements of the Community, ie—on the assumption Norway joins, the Community will be self-sufficient.

4. Ferro-silicon

CET 73.02(C) 10 per cent

UK 73.02(B) mfn: free; preferential: free

It has been agreed that there is no need to introduce special measures in favour of the UK, given the prospects for the enlargements of the Community, in particular the accession of Norway, and in view of the fact that all the Member States of the enlarged Community will have the possibility of requesting, if necessary, the application of Article 28 of the Treaty of Rome, with a view to taking the appropriate tariff measures.

5. Ferro-chrome

CET 73.02(E)I 8 per cent

UK 73.02(A) mfn: free; preferential: free

There is no need for special measures in favour of the UK, taking into account, on the one hand, the zero-duty Community tariff quota for super-refined ferro-chromium bound under GATT, in which the Applicant States will participate upon accession, and, on the other hand, the possibility open to all Member States of requesting, if necessary, the application of Article 28 of the Treaty of Rome with a view to taking the appropriate tariff measures.

6. Wood pulp

CET 47.01 A and B 3 per cent

UK 47.01 A mfn: free preferential: free

Woodpulp is covered by Protocol No. VII to the 'List G' Agreement, signed March 2, 1960. (See page 213 of the Treaty of Rome, as published by HMSO.) This provides for Member States to introduce reduced duty or nil duty quotas to cover the whole of their requirements, subject to their informing the Commission. In June 1966, the Council agreed that after the reduction of the CET duty on woodpulp from 6 to 3 per cent following the Kennedy Round this 3 per cent duty would be suspended, according to a timing to be determined. The date has still to be determined. However, the EEC has given an assurance that, upon accession, the Applicant States will benefit from the same conditions of supply—ie zero duty—as the present Member States, without limits or restrictions, until such time as the CET is totally suspended.

7. Newsprint

CET 48.01(A) 7 per cent

UK 48.01(B) (3) (e) mfn: free; preferential: free

On top of the zero-duty tariff quota of 626,000 metric tonnes bound under GATT, which will, however, be reduced to take account of Norway's accession, it has been agreed that the enlarged Community will open an autonomous zero-duty Community tariff quota which will be decided by the Council when it is established that all possibilities of supply on the internal market of the enlarged Community have been exhausted during a given trading year.

It has also been agreed to redefine the 'newsprint' tariff heading, with a view of lowering the minimum weight limit from 48 g. to 40 g. per square metre.

8. Unwrought lead

CET 78.01(A) $13.2 per metric ton (ad valorem incidence about 4 per cent)

UK 78.01(A) mfn: 5 per cent; preferential: free

1. On July 1, 1971, a new sub-heading will be created under Tariff Heading No. 78.01, defined as follows:

'argentiferous lead: unwrought lead containing not less than 0.02 per cent silver, intended for refining.'

This new sub-heading is to be given an ad valorem duty of 4.5 per cent.

For 1971 and up to the entry into force of a total suspension, of unlimited duration, of the duty on argentiferous lead, a Community zero-duty tariff quota will be opened. Its amount will be equal to the sum of the requests put forward by the Member States concerned, plus a reserve. In 1971 the total volume of this quota will be 130,000 metric tonnes.

* The Common External Tariff of the EEC and the UK tariff are given at the rates they will be on January 1, 1972, after the final reductions to implement the Kennedy Round agreements.

On some items a further reduction was conditional on the United States Congress passing legislation to abolish the American Selling Price method of valuation, which they have not yet done.

As from January 1, 1974, the Applicant States will participate in the Community tariff quota for argentiferous lead.

As from January 1, 1975, the duty on argentiferous lead will be suspended at 2 per cent.

As from 1973, there will be an annual review of the possibility of a total suspension, for an unlimited period, of the duty on argentiferous lead.

2. With regard to '*refined lead*' (unwrought lead of heading 78.01 which does not fall under the new argentiferous lead subheading referred to above) the following measures are envisaged:

On January 1, 1974, the present duty of $13.2 per metric ton will be changed to an ad valorem duty of 4.5 per cent with a minimum charge of $11 per metric ton. For 1971, 1972 and 1973, a Community zero-duty tariff will be opened, with a volume of, respectively, 65,000, 60,000 and 55,000 tonnes.

From January 1, 1974 the Applicant States will participate in this Community tariff quota. In order to take account of the enlargement of the Community, the phased reduction in the volume of the Community tariff quota will be interrupted during 1974, so that the total amount of the quota will not be reduced below that of 1973. The phased reduction will be resumed in 1975 so that the quota is completely abolished by the end of the transitional period.

The situation will be re-examined before the abolition of the quota, with a view to deciding on a possible limited reduction of the duty (with a minimum charge of $11 per metric ton).

9. Unwrought zinc

CET 79.01(A) $13.2 per metric ton = 6 per cent

UK 79.01(A) mfn: £1.50 per ton; preferential: free

From 1971 a degressive zero-duty Community tariff quota will be opened, which will disappear at the end of the transitional period. In 1971 its volume will be 30,000 tonnes (including reserve).

With regard to the phased reduction after 1971, a solution similar to that for refined lead is envisaged.

As from January 1, 1974, an ad valorem duty of 4.5 per cent will be applied, with a minimum charge of $11 per metric ton.

10. Wattle extract

CET 32.01(A) 9 per cent, also on chestnut extract

UK ex-32.01(B) mfn: 8 per cent (5 per cent if ASP is abolished); preferential: free

It has been agreed to suspend partially the CET duty, for an indefinite period, to a rate of 3 per cent, taking into account the possibility open to all Member States of the enlarged Community to request, if necessary, application of Article 28 of the Treaty of Rome.

From July 1, 1973, the UK will apply a zero duty on imports of wattle and chestnut extracts from the present Member States.

11. Plywood

CET 44.15(A) 13 per cent

UK 44.15(A) mfn: 5 per cent; prefrential: free

Under Tariff Heading No. 44.15 there will be a new subheading, defined as follows:

'plywood of coniferous species

(*a*) of a thickness greater than 9 mm. of which the faces are not further prepared than the peeling process

(*b*) sanded, of a thickness greater than 18.5 mm.'

For this sub-heading, from January 1, 1974, two autonomous zero-duty Community tariff quotas will be opened, the amount of which will be decided annually by the Council when it is established that all possibilities of supply on the internal market of the enlarged Community have been exhausted during a given trading year.

From April 1, 1973, the Applicant States will apply a zero duty to imports from the present Member States. Note was taken of the fact of the large zero-duty imports of plywood from Finland into the UK, and also imports from countries which will benefit from the Community's generalised preference scheme. It was agreed that if these conditions were to undergo important changes, the situation would be re-examined.

12. Alumina

CET 28.20(A) 8.8 per cent (5.5 per cent if ASP were abolished)

UK 28.20(B) mfn: 9 per cent (8 per cent if ASP is abolished); preferential: free

It has been agreed that the CET will be suspended to 5.5 per cent from January 1, 1975 at the latest. Imports of alumina into the United Kingdom will be duty free until January 1, 1976, will as from that date pay half the suspended rate, and will from July 1, 1977, pay the full 5.5 per cent rate.

This agreement took account of the possibility open at all times to all the Member States of the enlarged Community to request, if necessary, the application of Article 28 of the Treaty of Rome with a view to taking any appropriate tariff measures which the particular conditions of the aluminium industry might call for. Account was also taken of relations between the enlarged Community and the independent developing Commonwealth countries, particularly those in the Caribbean, it being understood that the situation would be re-examined should the decisions to be finally adopted not entail the application of a zero duty on imports of alumina from these countries.

In addition, the following arrangements were agreed for tea:

Tea

CET 09.02(A) tea in packets of not more than 3 kg. 11.5 per cent
Duty rate reduced to 5 per cent for an indeterminate period.

09.02(B) tea in packets of more than 3 kg. 9 per cent
Duty rate wholly suspended at 0 per cent for an indeterminate period.

UK 09.02 mfn: free; preferential: free

The EEC has decided that, as from January 1, 1971, the date of the entry into force of the Yaounde II Convention, the CET duty suspensions are to be continued indefinitely on

—tea in packets of not more than 3 kg. at the level of 5 per cent

—tea in packets of more than 3 kg. 0 per cent

EEC/EFTA Information Unit at DTI

THE EFTA INFORMATION CENTRE at the Department of Trade and Industry has now been expanded into the EEC/EFTA Information Unit.

EEC Information: The Unit is the Department's central inquiry point for general questions and, where necessary, will put inquirers in touch with appropriate specialists in the Department. Inquiries on specific matters, however, should continue to be addressed to the appropriate part of the Department dealing with the particular matter where this is known.

EFTA Information: The Unit will continue to disseminate information about the European Free Trade Association and to deal with general inquiries and advise on sources of more detailed information on EFTA. Copies of EFTA publications (including the Secretariat's regular EFTA Bulletin) can be obtained free of charge from the Unit.

The EEC/EFTA Information Unit is at DTI, 1 Victoria Street, London SW1H 0ET. Telephone: 01-222 7877. EEC Inquiries Ext. 2479 or 3579, EFTA Inquiries Ext. 2479 or 2480.

A library for exporters

Foreign trade statistics and other economic statistics from almost every country in the world are available for reference in the Department of Trade and Industry Statistics and Market Intelligence Library at Export House, 50 Ludgate Hill, London, EC4M 7HU. A modern well-equipped library of over 85,000 volumes, it has a reading room for visitors, and provides a document-copying service. There are trade directories covering 150 countries, and an expanding collection of trade catalogues of overseas manufacturers. The library opens from 9 to 5.30, Mondays to Fridays (Tel. 01-248 5757, Ext. 368 or Telex No. 886143).

Free depreciation in development areas

AMONG THE MEASURES announced by the Chancellor of the Exchequer on July 19 was the extension to new immobile machinery or plant, purchased for use in the service industries in development areas, of the free depreciation provisions previously applying only to new immobile machinery or plant used for industrial purposes. The necessary legislative changes will be made in next year's Finance Bill but the free depreciation provisions will apply to capital expenditure by the service industries incurred on or after July 20, 1971.

The effect of this is to remove, in development areas, any discrimination in machinery or plant taxation allowances between manufacturing and service industries and to provide free depreciation for all new machinery or plant (other than road vehicles) in these areas. The extended range of capital equipment qualifying for free depreciation in development areas now includes such items as computers, office furniture and machinery, shop fittings, cash registers, canteen and kitchen equipment, fork-lift trucks and similar vehicles designed for internal use, garage equipment, lifts storage racks and bins for use in commercial as well as industrial premises, and air conditioning and central heating equipment in shops and offices as well as in factories.

As explained in the July 22 issue of *Trade and Industry* (page 115) this year's Finance Bill has been amended to permit a company (but not an unincorporated business) to carry back, for set-off against its trading profits of the preceding three years, any excess of free depreciation on development area machinery or plant over its taxable profits of the current year. This provision will now apply to both manufacturing and service industries.

Government support for CoID to continue

THE GOVERNMENT is to continue support of the Council of Industrial Design to enable it to carry out its essential educational and promotional role, Mr. John Davies, MP, Secretary of State for Trade and Industry, said in a written answer in the House of Commons on July 23.

Announcing the result of his review of the Council, the Secretary of State said: 'I am satisfied that the Council has had a significant and beneficial influence on the standards of industrial design in this country and that there is a continuing need for Government support to enable it to carry out its essential educational and promotional role.

'Earlier I asked the Council, in collaboration with the Council of Engineering Institutions, to consider how progress might be made toward improving the standards of engineering design, and to this end an Engineering Design Advisory Committee has been established. I am convinced that the Council can give a valuable lead in this field.

'Accordingly I have now asked that it should adjust its priorities and, over time, give greater emphasis to this work.'

BJCC and BNEC launch 'International Trade Project'

THE BRITISH Junior Chambers of Commerce, with 8,000 members, has been backed by the British National Export Council in a campaign called 'The International Trade Project'.

Over the next 10 months their 125 Junior Chambers will be doing all they can to assist exports. The programme will culminate with an International Trade Conference to be held on March 16 and 17 at which the chairman will be Lord Watkinson, chairman of Cadbury-Schweppes Ltd., the founder of BNEC and chairman of BNEC/USA committee.

Conference themes will include reports on the impact of the Project and specialist instruction in education and training, international distribution, communications and available services for exporters.

Eight regional organisers have been set up in England, Wales and Northern Ireland to stimulate industry in their areas.

For further details apply to: Alan Bramley, National Project Manager, Holly Cottage, Ham Green, Redditch, Worcestershire. Tel. Home 07392-63035; business 0682-4244, or Charles W. Weekes, 'Taurus', Peters Road, Sarisbury, Southampton. Tel. Locksheath 84401 (STD Code 04 895).

Proposed pipeline from Mablethorpe to Immingham

MR. JOHN DAVIES, Secretary of State for Trade and Industry, has granted a pipeline construction authorisation to Conoco Ltd. to construct a six inch diameter pipeline, about 29 miles long, in Lincolnshire to convey gas condensate from the company's North Sea Gas Terminal at Mablethorpe to their refinery at Immingham.

Gas condensate is a liquid which is separated from natural gas at the gas terminal before the gas is passed to the gas transmission pipelines for general distribution. It is a light hydrocarbon oil similar to petrol.

Gas turbine generating stations at Watford and Letchworth

THE SECRETARY of State for Trade and Industry has authorised consent to be given to the Central Electricity Generating Board to construct 150 MW gas turbine generating stations at Watford and Letchworth in Hertfordshire. Both will be on the sites of former stations, in Cardiff Road, Watford, and Works Road, Letchworth.

Background Note:

Gas turbine generating stations have the advantage of a rapid starting-up and are most useful in meeting peak load demands. They are designed to use a light fuel oil of low sulphur content.

No objections were received in response to the public advertisement of these proposals, which were approved by the local planning authority (Hertfordshire County Council) subject to conditions acceptable to the CEGB.

HM Customs and Excise Public Notice No. 1000

A NEW Public Notice No. 1000, containing a list of Public Notices obtainable from HM Customs and Excise, has recently been published. Copies have already been distributed by HM Stationery Office to all persons, firms etc. who are on the public subscribers' list to the Tariff and amendments service. Further copies can be obtained from HM Customs and Excise, Kings Beam House, 39-41 Mark Lane, London EC3R 7HE.

Sources of advice about Metrication

THE METRICATION BOARD has published a series of leaflets listing sources of information about metrication in most regional centres.

The latest are on Manchester and Birmingham. The full list of those available is: Belfast, Birmingham, Bristol, Coventry, Glasgow, Huddersfield, Leeds, Liverpool, Manchester, Newcastle, Norwich.

Each gives addresses of local organisations which can provide general advice on metrication, technical and operational information and also assistance with training. Leaflets covering other areas are being prepared and one for Cardiff will be published shortly.

The Sources of Information series are available free of charge from the Information Office, Metrication Board, 22 Kingsway, London WC2B 6LE.

New factory for Stonehaven

THE North-east Scotland Development Authority, announce that the Treasury, on the recommendation of the Development Commission, have given approval in principle to the erection of a 5,000 sq. ft. advance factory at Stonehaven.

The factory will be built by Scottish Industrial Estates Corporation on land to be acquired from Kincardine County Council on their Spurryhillock Industrial Estate at Stonehaven.

Food for thought — and export — in EIS opportunities

HAVE ICELANDERS a sweet tooth? Do the Germans and Belgians want fresh salmon? Will the Kuwaitis buy canned foods? Can you sell sunflower oil to Yugoslavia? There are prizes for answering these questions—in the shape of new business for food manufacturers and processors who obtain early knowledge of export opportunities for their products in the world's markets.

An invaluable 'early warning' system, where much of the information available is exclusive, is DTI's Export Intelligence Service, based on Export House in London. Details of export opportunities are received daily at Export House from commercial staff in the 220 British Embassies, High Commissions and Consulates throughout the world. This information is computer-coded and issued by EIS so that it reaches subscribers to the service within 48 hours of its receipt in London. The cost of this service? £25 for 500 items of export information. In other words five new pence could be the cost of opening up business worth thousands of pounds.

In the past ten years or so, there have been radical changes in food processing, and presentation—the large growth in markets for convenience foods is an example. And these changes are reflected in the inquiries from potential customers which are passed on to EIS subscribers.

During the past six months, some 1,180 export opportunities in food and allied products have been published by EIS. They have covered all types of confectionery and biscuits; dairy products; jams and preserves; food essences and additives; canned foods of all kinds; fresh and frozen meat, fish, poultry, vegetables and fruit; soups and sauces; health, infant, invalid and dietetic foods; gourmet items and convenience foods; and have included, as well as a range of miscellaneous edible preparations, animal and vegetable oils.

The notifications related to specific export opportunities agency enquiries market pointers and calls for tender, and they came from over 60 countries—from Iceland to South Africa, from the Western Hemisphere to the Antipodes, demonstrating the wide commodity and geographical coverage of the Export Intelligence Service.

Whether a supplier is looking for an agent in some countries, potential customers in others, opportunities for shared production or details of tariff changes in yet others, there is a wide range of export intelligence available—all of which can be had in any combination of country/commodity permutation according to individual requirements. In addition, advance notice about overseas trade fairs, British Weeks, etc., and quarterly reports on economic conditions in over 100 countries, are all provided as part of EIS.

For full details of EIS contact the nearest DTI Regional Office or the DTI offices in Scotland or Wales; or Export Data Branch, Export House, 50 Ludgate Hill, London EC4M 7HU (Tel. 01-248 5757; telex 886143 DTIEXPORT LDN).

Decimal changeover period to end on August 31

THE GOVERNMENT announced in Parliament on July 15 their acceptance of the Decimal Currency Board's recommendation that the changeover period (during which old and new money remain legal tender) will end on August 31 this year. This will be six-and-a-half months after D Day (February 15) when Britain began the changeover to decimal currency. From September 1 old pennies and threepenny bits cease to be legal tender. In May the Board stated that on March 31 no more than 3 per cent of retailers were still using old pennies and threepenny bits in changegiving. By the middle of June almost £13 million worth of these coins had been returned to the Mint out of a total estimated circulation of about £20 million worth at D Day. The Board state that shillings and two-shilling pieces will continue as 5p and 10p coins because they are completely interchangeable and the sixpence will continue as 2½p at least until February 1973.

Visits by British Overseas Commercial Representatives

THE FOLLOWING Commercial Diplomatic Officers are expected to be in this country shortly, when they will be available for discussion.

CANADA: Mr. R. C. Makin, Commercial Officer in Ottawa since 1967. Available: October

GHANA: Mr. G. R. Webb, Second Secretary (Commercial) in Accra since June 1969. Available: October

NEW ZEALAND: Mr. W. J. Rumble, First Secretary (Commercial) in Christchurch since September 1969. Available: October

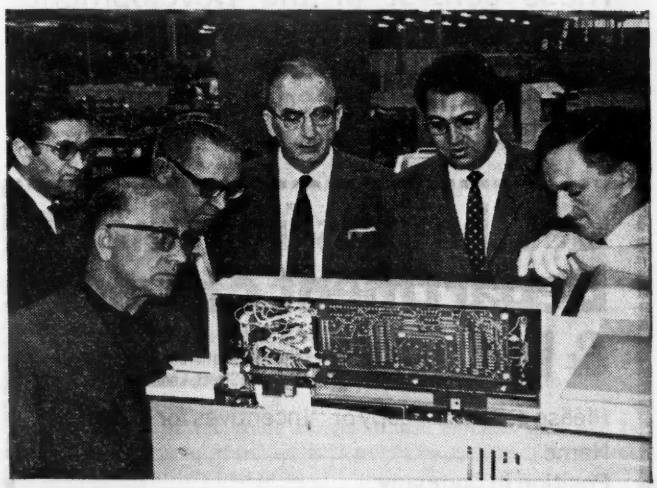
NIGERIA: Mr. P. J. Marshall, Second Secretary (Commercial/Information) in Kaduna since December 1970. Available: September/October

NIGERIA: Mr. H. McBrinn, Second Secretary (Commercial) in Lagos since June 1969. Available: October

PERU: Mr. P. J. Spiceley, Third Secretary (Commercial) in Lima since April 1969. Available: October/November

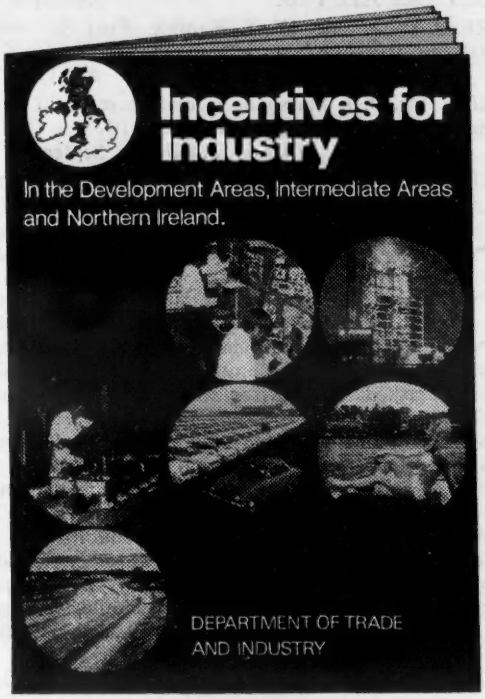
British firms and organisations, other than those in the areas covered by the Department of Trade and Industry offices for the Eastern Region and the London and South Eastern Region, who wish to meet any of these officers to discuss specific export problems are asked to write for an appointment to the appropriate Department of Trade and Industry Regional Director (Exports) stating the nature of the problem and commodities involved. (The Department's Regional Offices together with the areas covered and the appropriate office for Northern Ireland were listed on page 445 of *Trade and Industry* of March 3, 1971). Those firms and organisations in the London-based Regions mentioned above (together with those in other Regions who would prefer, or who would be prepared if necessary, to meet the officer for an interview in London) should write to Tours Section, Department of Trade and Industry, Room G60, Export House, 50 Ludgate Hill, London EC4M 7HU.

Because visiting officers often have only limited time at their disposal it may not always be possible to arrange an interview. Where it is not possible, firms are reminded that the Export Services Division of the Department of Trade and Industry, Export House, 50 Ludgate Hill, London EC4M 7HU, who are in close touch with all overseas representatives can very often supply advice, or the information that applicants hoped to obtain at the interview. Outside London the Regional Offices of the Department of Trade and Industry or, in Northern Ireland, the Ministry of Commerce, Belfast, can also supply this help.



Visitors from S. A. Arbed, the Steel Company of Luxemburg, at the Rank Xerox Plant at Mitcheldean, Gloucestershire. Picture shows from left to right Mr. P. Hellinckx (Rank Xerox Luxemburg), Mr. J. Konter, Mr. C. Lambers, Mr. C. Arnold and Mr. J. Becker, all of S. A. Arbed, being shown the new 4000 copier production line. The 4000 is the first copier to copy automatically on both sides of the paper. S. A. Arbed is Rank Xerox' biggest customer in Luxemburg.

Get this up to date booklet on the Areas for Expansion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In the Development Areas, Intermediate Areas and Northern Ireland.
DEPARTMENT OF TRADE AND INDUSTRY

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This new booklet tells you all about the latest incentives available to industry in the Areas for Expansion. These consist of the Development Areas, the Special Development Areas, the Intermediate Areas and Northern Ireland. All you need do to get your copy is fill in the coupon.

Get the facts from the Department of Trade & Industry

to: "INDUSTRIAL EXPANSION", Department of Trade and Industry, 1 Victoria Street, London S.W.1.

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TIJ16

Applications for temporary exemption from import duty

THE Department of Trade and Industry are considering applications for the temporary exemption from import duty of the materials listed below on the grounds that these materials are not made in this country or the Commonwealth or the supply available from these sources is not substantial having regard to the existing United Kingdom demand.

Representations are invited from manufacturers in this country or agents of Commonwealth manufacturers who consider they are, or will be within a reasonable period, in a position to supply a substantial proportion of the United Kingdom demand for these materials, or who are interested in their future production.

Temporary exemptions come into effect on the operative date of the Treasury Order in which the materials are specified and normally continue until the end of the current calendar year, when they are reviewed.

Interested parties who wish to make representations should address them to Tariff Division, Department of Trade and Industry, Brunswick House, 2 Central Buildings, Matthew Parker Street, London, S.W.1, preferably through a Trade Association, giving the respective reference shown below and stating whether their names may be passed to the applicants for temporary exemption. Representations should be received by August 12.

Tariff Heading	Proposed definition for tariff purposes	Applied for as	Exemption required until	Reference
29.08	2,2-Di-[4-(2-hydroxy-ethoxy)phenyl]propane	2.2-Di-[p-(2-hydroxyethoxy)-phenyl]propane	31 December, 1971	13642
29.36	Frusemide	4-Chloro-N-furfuryl-5-sulphamoylanthranilic acid	31 December, 1971	13634
39.01	Polyurethanes of wholly aliphatic composition, uncompounded and in the forms covered by Note 3(b) of Chapter 39	Ultramoll PU	31 December, 1971	13587
44.09	Cleft pales, stub-pointed, not less than 3 ft. nor more than 6 ft. in length, split from stems or branches of sweet chestnut of not less than 4 in. girth	Chestnut pales	31 December, 1971	11623

Open General Licence for nickel-bearing alloys

IN VIEW of the improved nickel supply position, it has been decided to amend the export licensing regulations concerning iron and steel alloys containing nickel. At present iron and steel alloys containing 50 per cent or more of iron and 5 per cent or more of nickel are subject to individual licensing where the value does not exceed £350 per ton. This limit will be lowered to £150 per ton.

With effect therefore from August 3, 1971, an Open General Licence will come into operation permitting the export of this material where the value exceeds £150 per ton.

The text of the Open General Licence is as follows:

EXPORT LICENCE—NICKEL BEARING IRON AND STEEL ALLOYS

Open General Export Licence dated July 27, 1971
granted by the Secretary of State

The Secretary of State, in pursuance of Article 5 of the Export of Goods (Control) Order 1970,[a] hereby grants an Open General Export Licence authorising the exportation, other than to a destination in Southern Rhodesia, of the following goods namely:

(1) Alloys of iron or steel containing 50 per cent or more of iron and 5 per cent or more of nickel; and

(i) of a value which, as required by the Commissioner of Customs and Excise to be declared, does not exceed £150 per ton; and

(ii) in any of the forms mentioned in paragraph (2) below, other than—

(a) (i) armour plate

(ii) precipitation hardening steels containing 4 per cent or more of nickel, or

(b) alloys containing one or more of the following constituents in the proportions stated:—

(i) 10 per cent or more of molybdenum;

(ii) more than 5 per cent of molybdenum together with more than 14 per cent of chromium;

(iii) 1.5 per cent or more, separately or combined, of niobium or tantalum;

(iv) 35 per cent or more of alloying elements (other than iron) one of which is nickel, together with 0.4 per cent or more of titanium or 0.8 per cent or more, separately or combined, of niobium or tantalum.

(2) The forms referred to in paragraph (1) are:

'Form I', namely, anodes, balls, bars (including notched bars, wire bars and bar ends), billets, blocks, blooms, briquettes, cathodes, cakes, crystals, cubes, dice, grains, granules, ingots (including ingot bars and ingot discards), lumps, pellets, pigs, powder, vondelles, shot, slabs, slugs, sponge and sticks;

'Form II', namely, wrought or worked material (whether or not coated, plated, drilled or punched) in the form of angles and channels and other sectional material (including crop ends), circles, discs, dust, flakes, foil and leaf, forgings, plates and plate cuttings, powder, pressings and stampings, raspings, ribbons, rings, rods (including bare welding rods, wire rods and rod ends), sections, shapes, shavings, sheet and sheet cuttings, strip, pipes and tubes (including tube rounds, squares and hollows) and wire; and

'Form III', namely, cast material (whether or not coated, plated, drilled or punched).

This Instrument shall come into operation on August 3, 1971.

N. E. ROBINS
An Assistant Secretary
Department of Trade and Industry

July 27, 1971.

(a) S.I. 1970/1288

Enquiries should be addressed to the Department of Trade and Industry, Export Licensing Branch, 54 Broadway, London SW1 from whom copies of the Open General Licence may be obtained free of charge. These, and any future Open General Export Licences, will not be published by HMSO.

Patents endorsed 'Licences of Right'

UNDER SECTION 35 of the Patents Act 1949, the following patents were endorsed 'Licences of Right' on the dates specified.

Number	Grantee	Subject-matter
June 28, 1971		
830,915	The Sperry Gyroscope Co. Ltd.	Rate of climb meter
961,926	" " " " "	Control means for electric motors
1,125,416	" " " " "	Hand tool for depositing liquids
1,161,797	Gevaert-Agfa N.V.	Opticalley sensitised light-sensitive material
1,166,655	" "	Photographic colour process and light-sensitive elements
1,184,434	" "	Light-sensitive silver halide emulsions
1,191,638	" "	Methine dyes
June 30, 1971		
1,068,293	Boleslaw Antoni Emil Bodar Rousseau	Relating to walls
1,104,596	Outokumpy Oy	A method of sulphidising molten lead
1,124,975	" "	Preparation of sulphur
1,130,389	" "	Grate in a fluidised bed furnace
1,137,809	" "	Oxygen-free copper
1,171,017	" "	Apparatus for carrying out metallurgical treatment
1,145,727	Imperial-Riv S.r.l.	Alarm systems
1,150,558	Gevaert-Agfa N.V.	Development of light-senstitive silver halide materials
1,166,035	" "	Cyanoalkyl 2-pyrazoline-5- one and their use as photographic colour couplers

Any person who claims that the patentee at the time of endorsement of any of the above Patents was precluded by a contract in which claimant is interested from granting Licences under the patents may apply for cancellation of the endorsement on Patents Form No. 45 within two months after the date of endorsement.

E. ARMITAGE
Comptroller

UK to introduce generalised tariff preferences in developing countries on January 1, 1972

REPLYING ON JULY 26 to a Parliamentary question which asked when Britain proposed to introduce generalised tariff preferences for manufactured goods and certain processed agricultural products of developing countries, Mr. Michael Noble, Minister for Trade said:

'My Rt. Hon. Friend intends to lay later this year an Order and regulations under the Import Duties Act 1958, when it is amended by the Finance Act, to bring the new arrangements into effect from January 1, 1972. They will be broadly the same as the offer submitted to UNCTAD last year and full details will be published as soon as possible. The beneficiaries of our scheme, initially at least, will be the countries in the so-called "Group of 77" in UNCTAD and dependent territories that are the present beneficiaries of the EEC scheme as well as developing commonwealth countries not members of this group.'

Background notes

The 'Group of 77' of UNCTAD members in fact consists of 91 countries. Almost all the developing countries of Latin America, Africa and Asia, and Yugoslavia. The idea of 'generalised' tariff preferences for imports from all developing countries was discussed at the first United Nations Conference on Trade and Development (UNCTAD) in 1964 when the UK, whose delegation was led by Mr. Edward Heath (then Secretary of State for Industry, Trade and Regional Development), was the first major country to support it. At New Delhi in 1968, the second UNCTAD Conference unanimously passed a resolution supporting the establishment of a non-reciprocal, non-discriminatory generalised system of preferences in favour of developing countries, the objectives of which would be to increase their export earnings, promote their industrialisation and accelerate their economic growth. After much discussion both in OECD among the developed countries themselves and also in the UNCTAD Special Committee on Preferences developed and developing countries, agreed in the Special Committee in October 1970 on 'mutually acceptable' arrangements.

Although agreed that they should all make equivalent efforts, the preference-giving countries in the OECD did not find it possible to agree on a uniform scheme of preferences but decided to proceed with individual schemes which they each considered should be expected to yield comparable results. They will hold regular reviews of the trade effects of the schemes and will be able to consider what modifications might be necessary to correct any serious disparities that arise.

The EEC introduced its generalised preference scheme on July 1. Japan intends to do so on August 1 and Switzerland, Sweden, Norway, Denmark, Finland and Austria all aim to implement their schemes on or before January 1, 1972. US Legislation has yet to be submitted to Congress. In the event of the UK joining the EEC, the UK scheme would have to be assimilated to that of the Community.

Mr. Corfield lists information on RB-211 supplied to United States Congress

IN ANSWER to a Parliamentary question on July 20, on further information supplied to the Congress of the United States of America about the RB-211-Lockheed 10.11 project, Mr. Frederick Corfield, Minister for Aerospace, said: 'With due regard for the need to preserve an ordinary degree of commercial confidence, I have kept the House fully informed about the process of negotiations on the RB-211 engine for the Lockheed TriStar. As the House is already aware, it is not my intention to give any information to Congress which has not been given to the House.

'Some information which had, I understand, been tabled in confidence by the US Administration and Lockheed has recently been published in the "Congressional Record". Of this material the item which directly concerns the United Kingdom is the text of Article 40 of the new contract negotiated between Rolls-Royce (1971) Ltd. and Lockheed to give effect to the arrangements which I announced to the House on May 10. The text of this Article is reproduced below.

'As I informed the House on July 5, the Chairman of the Banking and Currency Committee of the US House of Representatives was told that the United Kingdom Government is prepared to provide a further written statement. I am transmitting to the Chairman of the Banking Committee the answers to certain questions which the Committee recently asked, and the text of these answers is also reproduced below.'

Article 40 of Rolls-Royce/Lockheed contract on supply of RB-211 engines

A The obligations of ROLLS-ROYCE and LOCKHEED under the preceding provisions of this Basic Agreement shall take effect only if and when:

(1) the United States Government gives notice to the United Kingdom Government that

(a) the United States Government, having obtained the authority of Congress, is prepared to give guarantees for the benefit of LOCKHEED in an amount of up to dollars 250 million, which amount, together with the funds available to LOCKHEED from private sources without Government guarantee, the United States Government considers sufficient to enable LOCKHEED to carry out the L-1011 project; and

(b) before seeking the authority of Congress referred to above, the United States Government satisfied itself, having regard to the orders for L-1011 aircraft placed with LOCKHEED and the orders for L-1011 aircraft that might reasonably be expected to be placed with LOCKHEED, that LOCKHEED will be able to carry out the L-1011 project.

(2) Mutual signature and delivery takes place of amendments to the respective existing Airplane Sales Contracts for Model L-1011 airplanes between LOCKHEED and Eastern, TWA, Delta, Air Canada, Air Jamaica, PSA and Haas/Turner which affirm their intention to continue their participation in the L-1011 programme.

(3) Assignments to ROLLS-ROYCE of the existing spare engine contracts with Eastern, TWA, Delta, Air Canada and Air Jamaica, including the granting of general releases in respect thereof in favour of Rolls-Royce Limited and the Receiver of Rolls-Royce Limited, are mutually signed and delivered and amendments to those contracts reflecting changes in specification, delivery, price and parts costs guarantees are also mutually signed and delivered.

(4) A contract between ROLLS-ROYCE and the United Kingdom Government covering the total funding of the RB.211 development and production programme is mutually signed and delivered or ROLLS-ROYCE receives from the United Kingdom Government assurances satisfactory to ROLLS-ROYCE relating to such total funding.

(5) LOCKHEED is notified in writing by the United Kingdom Government that the United Kingdom Government has satisfied itself that the contract or the assurances referred to in sub-paragraph (4) of this Paragraph A will provide total funding which might be reasonably expected to enable ROLLS-ROYCE to carry out the RB.211 development and production programme.

B If the conditions specified in Paragraph A above shall not all have been satisfied before August 8, 1971 the obligations of ROLLS-ROYCE and LOCKHEED under this Basic Agreement shall not take effect at all and the Basic Agreement shall on that date cease to be binding in any respect.

C LOCKHEED shall promptly notify ROLLS-ROYCE in writing if and when the conditions described in sub-paragraphs (2) and (5) of Paragraph A above have been satisfied; and ROLLS-ROYCE shall promptly notify LOCKHEED in writing if and when the conditions described in sub-paragraphs (3) and (4) of Paragraph A above have been satisfied.

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Answers to Questions from Banking and Currency Committee of US House of Representatives

QUESTION	ANSWER
1. What was the original contract price of the RB.211?	$2,446,340 per ship set of three engines
2. What was the date of that contract?	March 28, 1968.
3. What is the history of price changes from that date to the present?	The original price was subject to escalation. Customer demanded modifications have added $101,476 per ship set to the original price.
4. What is the price that has finally been agreed to for the production engines if the RB.211 and L.1011 programmes continue?	$2,995,116 per ship set of three engines.
5. There have been press and other reports in this country indicating that the RB.211 scheduled to be used in flight certification (estimated by Lockheed to take place on April 1972) is below initial specifications. At sea level and 84°F what is the rated take-off thrust of that engine?	The original thrust was 40,600 lb. (84°F day). In June 1970 Lockheed requested an increase in thrust. This was achieved by reducing the hot day performance of early engines to 38,750 lb. (84°F day) and offering the full 42,000 lb. (84°F day) about one year after initial introduction into service. Thus April 1972 engines will give 42,000 lb. (standard day) and 38,750 lb. (84°F day).
6. Is this below the engine performance as specified in the original contract or guarantee for the aircraft originally scheduled to be flown in November 1971 or thereabouts?	Yes, for reasons stated.
7. Is it correct that Rolls-Royce has now undertaken to produce an engine with 42,000 lb. of thrust at sea level and 84°F?	Yes.
8. Is it also true that the target date for that engine is April 1973?	Yes.
9. What are the reasons for going from the original specification of 40,600 lb. for the November 1971 aeroplane to the 42,000 lb. scheduled for April 1973 (assuming the information as reported is substantially correct)?	Due to the customer's request as indicated.
10. If there are essential errors in these data as they have been reported, would you indicate what the correct data are and provide us the correct information as to the original and subsequent commitments, accomplishments and expectations as to the thrust of the RB.211?	See above.
11. What is the original weight of the RB.211 as guaranteed in or about April 1968?	The original weight, agreed between April 1968 and early 1969, was 34,333 lb. per ship set.
12. What will be the weight of the engine delivered for the April 1972 aeroplanes?	38,500 lb.
13. What will be the weight of the 42,000 lb. thrust engine targeted for April 1973 delivery (again assuming the reports are approximately correct)?	38,500 lb.
14. Has Rolls-Royce or Her Majesty's Government made any commitment, or does it intend to make any commitment to indemnify Lockheed or Lockheed's customers for any delay beyond the new scheduled delay dates which we understand have been tentatively agreed to between Lockheed and Rolls-Royce?	The new conditional contract provides at article 10 that in the event of inexcusable delay in delivery, Lockheed will be reimbursed against damages suffered up to the limited specified in the contract. Provisions for liquidated damages are also included in all direct contracts with the airlines in relation to spare engines.

Parties to the Guadalajara Convention 1961

THE following list is of countries which are parties to the Guadalajara Convention 1961, supplementary to the Warsaw Convention, for the unification of certain rules relating to international carriage by air performed by a person other than the contracting carrier.

The list is of parties as at July 21, 1971, showing the date on which the Convention came into force for that country.

Australia	1. 5.64	Netherlands	25. 5.64
Austria	21. 3.66	New Zealand	17. 8.69
Belgium	4. 8.69	Niger	12.10.64
Brazil	9. 5.67	Nigeria	14.10.69
Chad	7. 6.71	Norway	20. 4.67
Colombia	31. 7.66	Pakistan	19.10.65
Czechoslovakia	25.10.67	Paraguay	31.12.69
Denmark	20. 4.67	Philippines	4. 7.66
France	1. 5.64	Poland	16. 3.65
Gabon	19. 5.71	Romania	20. 7.65
German Federal Republic	31. 5.64	Sweden	20. 4.67
Hungary	21. 2.65	Switzerland	1. 5.64
Ireland	19. 4.66	Tunisia	4. 8.70
Italy	13. 8.68	United Arab Republic	2. 8.64
Jamaica	1. 1.65	United Kingdom	1. 5.64
Lebanon	22. 5.67	UK Overseas Territories*	13. 6.67
Libya	20. 8.69	Southern Rhodesia	10. 3.65
Luxembourg	21.11.68	Zambia	30. 5.71
Mexico	1. 5.64		

*Bahamas
Bermuda
British Antarctic Territory
British Honduras
British Protectorate of the Solomon Islands
British Virgin Islands
Cayman Islands
Channel Islands
Falkland Islands
Fiji
Gibraltar
Gilbert and Ellice Islands Colony
Hong Kong
Isle of Man
Mauritius
Montserrat
St. Helena and Ascension
Seychelles
Turks and Caicos Islands
Akrotiri and Dhekelia Areas of the Sovereign Base on the Island of Cyprus

The main purpose of the convention is to remove the doubt whether a carrier on whom the Warsaw Convention imposes certain rules, means the person who contracts to carry or the person who actually performs the carriage. This it does by applying the rules of the Warsaw Convention to both the contracting and the actual carrier.

The Convention is drafted so as to be equally applicable to the unamended Warsaw Convention or to that Convention as amended at The Hague.

No noise infringements at Gatwick in April and May

THERE WERE NO infringements of the daytime or night time minimum noise levels for departing aircraft at Gatwick during April and May this year. For Heathrow the daytime infringement level was only a fraction of one per cent of total movements.

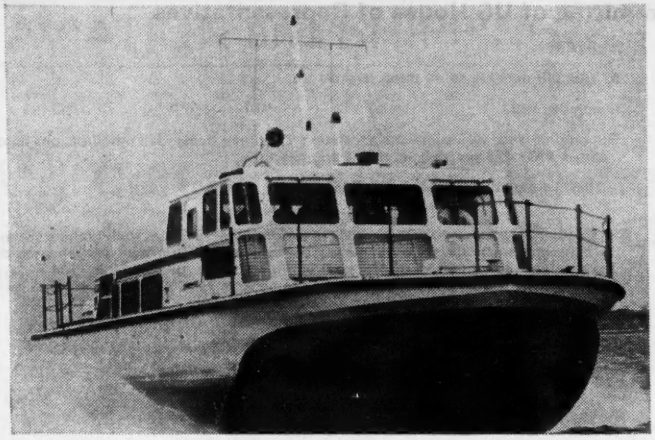
This improvement in observance of the minimum noise limits was revealed on July 21 by Mr. Michael Noble, Minister for Trade, in answering a written Parliamentary Question.

Asked when the results of noise monitoring so far at Heathrow and Gatwick airports this year were to be published, the Minister said: 'Figures for the first quarter published yesterday show that the average of daytime infringements was maintained at under one per cent of total movements. In April and May, daytime infringements at Heathrow were only a fraction of one per cent, while at Gatwick there were no infringements in either month.'

Background notes

Jet aircraft taking off from Heathrow and Gatwick must comply with noise limits. The daytime limyit is 110 PNdB and the night time limit is 102 PNdB, which reduces noisiness at night by over 40 per cent. Monitoring points under departure routes from these two airports ensure that noise limits at take-off are met. The daytime limit of 110 PNdB was set in 1958 at the noise levels then made by large piston-engined aircraft, the same limit still applies despite the fact that bigger and more powerful aircraft are now flying. A result is that some of the larger and noisier aircraft are unable to use certain runways, especially at night. Indeed sometimes big aircraft needing to carry large supplies of fuel for operations on transatlantic and polar routes cannot comply with the limit at full load. They thus have to reduce their load, which in turn means a refuelling stop later. The cost of these stops to airlines is about £400 each time, in addition to delays in schedules and other inconveniences. These noise limits make a big difference for residential areas crossed during the first few miles of the route.

The 1st quarter 1971 monitoring statistics were published in *Trade and Industry* for July 22.



Hovermarine Transport Ltd. of Woolston, Southampton, have announced the sale of an HM2 Sidewall Hovercraft to the Ministry of Public Works in Belgium. The craft purchased is a high speed general purpose version of Hovermarine's Mark 3 HM.2 and will be used by the Belgians to perform hydrographic surveys on the River Scheldt. This is the third HM.2 sale to be announced by Hovermarine within the month; the first two were passenger versions for delivery this summer to Portugal for ferry operations.

In recognition of their development of a method of applying 'swept gain' to the DTI radar equipment at Ash, Kent, three technical officers in the DTI's National Air Traffic Service have each been awarded £100. The effect of the development is to reduce unwanted response on the display screens from this radar, which plays an important part in the new air traffic control system centred on West Drayton. The development, which was proposed under the Department of Trade and Industry's Staff Suggestions Scheme, recently came second in the first national competition run by the National Suggestion Schemes Association. The technical officers concerned are Mr. Bert Burden, Mr. Ken Richardson and Mr. Denis Auton, of the Airways Services Telecommunications Group. They were presented with cheques for £100 by Sir Antony Part, Permanent Secretary, Department of Trade and Industry. In this picture, taken after the presentation, are (l. to r.) Mr. Burden, Mr. Richardson, Sir Antony Part, Mr. Auton and Mr. G. E. Graham, Deputy Director Telecommunications, Airways Services Telecommunications Group.

Airport powers to detain aircraft to come into effect

AIRPORT OWNERS will in future have powers to detain and eventually sell aircraft to meet unpaid airport charges.

The Civil Aviation Act 1968 (Commencement) Order 1971 brings into force on July 30 that part of the 1968 Act which enables any Government, British Airports Authority or local authority airport, or any private airport designated by the Department of Trade and Industry, to detain an aircraft pending the payment of airport charges, and subsequently if the charges remain unpaid to apply to the court for leave to sell the aircraft in order to obtain payment.

Further regulations ensure that interested parties receive adequate notice of any proposed application to the court.

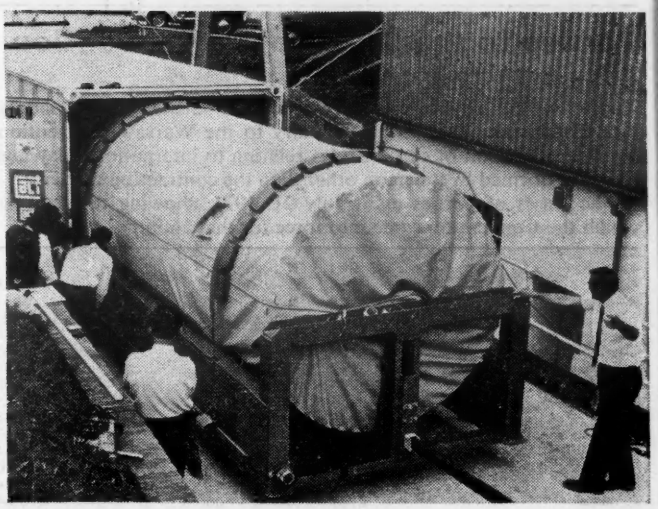
New Regulations also provide for the detention and sale of aircraft in default of the payment of navigation charges at those airports where the National Air Traffic Services provide the navigation facilities.

Public Inquiry into 'Barbara Paton' collision

THE PUBLIC INQUIRY into the accident to the motor trawler 'Barbara Paton' will open at 10.30 a.m. on Tuesday, October 12, 1971, at the Sheriff Court, Lawnmarket, Edinburgh.

The trawler was seriously damaged on a voyage from Scrabster to Granton when she reported striking a submerged object in Thurso Bay.

The public inquiry has been ordered by the Department of Trade and Industry under Section 466 of the Merchant Shipping Act 1894.



Black Arrow, the all-British space rocket scheduled to blast off from Woomera later this year is now on its way to Australia. Picture shows the first stage of the rocket, assembled by the British Hovercraft Corporation, being packed into a 40' ACT container at the Corporation's test base at High Down on the Isle of Wight. Before the container-ship leaves from Tilbury, materials handling experts from Associated Container Transportation will connect the container to a series of special instruments which will monitor its contents throughout the journey, recording the temperature, humidity, movement and any other factors likely to affect the cargo.

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POINTS from PARLIAMENT

Supplementary questions and answers on the points in these pages are published in *Hansard*

Trade and Industry

MONDAY, JULY 19

Trade with East Europe

Mr. Michael Noble, Minister for Trade, was asked in what respects the European Economic Community's Common Trade Policy differed from the United Kingdom's restrictions on trade with Eastern Europe, and also if the agreements reached in the negotiations with the European Economic Community would require, in the event of the United Kingdom's accession to the Community, liberalisation of the United Kingdom's restrictions on trade with Eastern Europe and permit an expansion of that trade.

Mr. Noble answered: 'The Community's commercial policy towards Eastern Europe, like our own, is based on a progressive liberalisation of trade. They have agreed lists of items on which Member States must not maintain import restrictions against State trading countries. The adoption of these lists will only involve minor additions to our own liberalised list and we are negotiating transitional periods for a very few difficult items.'

A Member who asked how many official visits would be made by Ministers of the Department of Trade and Industry this year to East European countries was told by Mr. Anthony Grant, Parliamentary Under-Secretary of State for Trade, that provisional plans allowed for five such visits.

Holiday tours

Referring to cancellations of tours and unsatisfactory tours since June 28, a Member asked if an impartial body would be set up to investigate the claim for compensation arising from the cancellation of tours, air flights alterations and provision of alternative hotels to those offered in the travel trade brochures, and if a departmental inquiry would be set up. Mr. Noble replied: 'I am aware that there have been complaints recently about difficulties experienced by holidaymakers on inclusive tours overseas but I do not consider that either an independent investigation or a departmental inquiry is necessary. The number of complaints is extremely small compared with the number of holiday visits abroad by UK residents.'

Weights and Measures

Stating that there was a national shortage of manpower employed in weights and measures departments of local authorities, a Member asked if the Secretary of State was satisfied with the effectiveness of the Government's consumer protection policy. Mr. Nicholas Ridley, Parliamentary Under-Secretary of State for Industry, replied: 'I am aware of certain shortages in some areas, but in general I consider that the enforcement work of which these local authority departments are responsible is satisfactorily discharged.'

Second mortgages

Mr. Ridley was asked whether legislative or administrative steps would be taken to discourage finance companies from enticing mortgagors to take out second mortgages on their properties. He answered that several of the recommendations of the Committee on Consumer Credit, under the chairmanship of Lord Crowther, would affect the activities of companies offering second mortgages. The Report of the Committee was under urgent consideration.

Insurance company legislation

A suggestion that an inquiry should be set up into the insurance industry, was answered by Mr. Ridley, who said: 'We are carrying out our own review into the question of possible changes in insurance company legislation.'

Shareholders in public companies

Mr. John Davies, Secretary of State for Trade and Industry, was asked if he would take steps to confer wider powers on shareholders in public companies to procure effective supervision of the conduct of their companies' affairs. 'I am considering what changes in company law would be desirable for this and other purposes,' he answered.

Trade with the Commonwealth and South Africa

Questions were asked on the proportion of British exports for the years 1968, 1969, 1970, and so far this year, represented by British exports to the Commonwealth, as defined in 1967, together with exports to South Africa. Mr. Anthony Grant answered: 'To the Commonwealth and South Africa, 27, 26, 25 and (to end May 1971) 26 per cent, respectively: to the Commonwealth alone 23, 22, 21 and 22 per cent, respectively.'

EEC membership: coal mining industry

An estimate was requested of the numbers of new jobs that would become available in the United Kingdom coal mining industry in the event of the United Kingdom joining the European Coal and Steel Community. Mr. Ridley replied that this would depend on the general expansion expected in economic activity as a result of membership of the enlarged Community and also on the success the National Coal Board achieved in expanding their exports to Community countries, for which there were great opportunities.

EEC membership: effect on imports of jute and mohair

Mr. Noble was asked to what extent India's exports of mohair and jute to the United Kingdom would be affected in the event of UK membership of the EEC. 'The CET on raw mohair and raw jute is zero and I would not expect our small imports of these from India to be affected by entry into the Community,' he replied.

Wool textiles

A question was put on the estimated percentage of total wool textile imports by the Common Market countries and Commonwealth, respectively, of British origin at the latest available date, and, in the case of the Commonwealth, by how much this figure differed from that for 1957. Mr. Grant replied: 'Five and a half per cent for the Common Market countries in 1969; and, for the five main countries accounting for much the greater part of all Commonwealth imports of these goods, about 30 per cent in 1969 compared with 64 per cent in 1957.'

Smokeless fuels

In reply to a request for a statement about the amount of anthracite and other smokeless fuel imports into the United Kingdom, Mr. Ridley said that 240,000 tons of smokeless fuels were imported in the six months following the lifting of restrictions on imports in early December 1970 compared with 40,000 tons in the 11 months to November 1970.

Mr. Ridley was also asked if he was aware of the difficulty in obtaining adequate supplies of smokeless fuel in Yorkshire and Humberside and said: 'I am not aware of any general shortage in this area, but the local availability of supplies is a matter for producers and merchants. I am asking the Solid Smokeless Fuel Federation if they will write to the hon. Member.'

Conversion to natural gas

A Member asked, referring to the statutory requirement of the gas board to bear the full costs of converting appliances to natural gas, what method of appeal the consumer had if the gas board attempted to charge for work which it was claimed was for remedying existing defects revealed by pre-conversion surveys, where the consumer felt that these should fall within the conversion costs. Mr. Ridley answered: 'Gas Boards are statutorily required to bear the cost of altering or re-

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POINTS FROM PARLIAMENT

Continued

placing burners on consumers' appliances where necessary when calorific value of gas is changed. Consumers who disagree with their Boards on responsibility for costs can make representations to their Consultative Council.'

TUESDAY, JULY 20

Boards of joint stock companies

A Member asked Mr. Davies if he was satisfied with the methods employed by the various departments of state in analysing and acting upon the reports which they received from Government directors on the boards of joint stock companies. Mr. Davies said: 'Yes, Sir, but we are always seeking to improve our working methods.'

Mr. Davies was also asked if he would institute an interdepartmental survey of the functions and terms of reference of Government-appointed directors on the boards of joint stock companies, with particular regard to ensuring that there was no conflict of interest arising from their responsibilities to the Government and any other directorships held.

'No, Sir,' he replied. 'The role of Government appointed directors was outlined in the reply given to my hon. Friend the Member for Bedford on June 28. The Government take into account the possibility of conflicts of interest arising when considering appointments.'

WEDNESDAY, JULY 21

Motor Insurance

Mr. Davies was asked whether in view of the delay of the British Insurance Association in complying with its expressed undertaking to set up a fund to compensate injured persons who would otherwise receive no compensation, he would now introduce legislation to prevent any recurrence of situations such as that created by the insolvency of a member company of that Association.

Mr. Davies replied: 'As part of the review of the controls applicable to insurance companies I am considering the question of compensation for those affected by motor insurance company failures.'

Commercial intelligence from British missions

Earl Ferrers was asked if the Government were satisfied with the speed, accuracy and volume of commercial intelligence fed back by commercial departments of British diplomatic and consular missions overseas. He replied: 'Commercial departments of our diplomatic posts abroad are very much alive to the importance which British exporters attach to getting the earliest hints of future business. Where the nature of the commercial intelligence justifies it, the information is passed by telegram or telex; about 50 per cent of all intelligence comes by this means. Commercial departments take the greatest pains over accuracy. As to volume, the output of intelligence has grown steadily and we are confident of achieving a continuing increase.'

Engineering consultants' overseas feasibility studies

In answer to a question on Government financial help to enable consulting engineers to offer on competitive terms feasibility studies for construction projects overseas which, if designed by British experts, could well result in substantial demand for British engineering and other exports, Earl Ferrers said: 'For just over two years now a Feasibility Fund has been at the disposal of the Department of Trade and Industry, for precisely this purpose. Up to £100,000 per year is available to help finance such studies, whether carried out by British consultants, engineering contractors or equipment suppliers. Since the inception of the Fund, 31 applications have been approved, to a total commitment of £98,000. The projects to which these 31 studies relate could offer good export opportunities to Britain totalling well over £100 million. The Fund is experimental and the Government wish to test its value.'

THURSDAY, JULY 22

EEC membership: Effects on self-employed businesses

A Member asked Mr. Noble to what extent he estimated the implementation of the Rome Treaty, if Great Britain entered the Common Market, in respect of the abolition by progressive stages on the restrictions of freedom of establishment, including the rights to engage in self-employed business by nationals of a Member State in the territory of another Member State, would assist or harm self-employed persons in Great Britain; and how it was proposed that this would operate in practice. Mr. Noble answered: 'Since there are at present very few restrictions based on nationality which apply to persons seeking to engage in self-employed business in the United Kingdom, I would not expect their removal after our entry into the EEC to have any significant effect on the prospects for self-employed persons in this country.'

FRIDAY, JULY 23

EEC membership: effect on fuel prices

In answer to a request for an estimate of the effect upon industrial and domestic coal prices of the requirement of the European Coal and Steel Community that the National Coal Board should charge the price of coal ex mine plus the full transport costs, Sir John Eden, Minister for Industry, said: 'Industrial coal prices should not be affected as the National Coal Board is already selling on an ex-mine basis. So far as domestic coal is concerned it is possible that some modification in their zone-delivered pricing arrangements may be necessary but I would not expect this to have a significant effect on price levels.'

Companies Act Consultative Committee

Mr. Grant was asked whether, as part of the review of the Companies Act, a study would be commissioned of existing company administration and law from an independent group of experts, such as the Companies Act Consultative Committee, given access to representations from the investing public, and subsequently laid before Parliament a statement showing how he proposes to implement their recommendations. Mr. Grant said: 'We shall consider any representations from the investing public, but we do not at present intend to commission a study or reconvene the Companies Act Consultative Committee.'

Aviation and shipping

TUESDAY, JULY 20

EEC membership: effect on aerospace and civil aviation

Questions were asked about plans for the future development of the United Kingdom aerospace and civil aviation industries, in the event of the United Kingdom not joining the Common Market, and what assurances were sought from the EEC regarding the future of these industries in the event of UK membership. Mr. Frederick Corfield, Minister for Aerospace, said: 'Neither industry required special consideration in the entry negotiations and no plans have been developed against the event of the United Kingdom not joining the Common Market. While I am convinced both that progressively closer relations between British and European aerospace industries is very much in the mutual interests of the firms and the countries concerned, and that British entry into the EEC will greatly enlarge the opportunities for forging such closer ties, I am equally satisfied that they can only be effectively achieved on the basis of negotiation between firms and countries involved as the opportunities arise. The United Kingdom already plays a full part in the work of the European Civil Aviation Conference, and this consultative machinery is unlikely to be greatly affected by the United Kingdom entering or not entering the EEC.'

WEDNESDAY, JULY 21

Cunard Steamship Company

A Member asked if the Secretary of State would lay down certain conditions in the event of a possible takeover of the Cunard Steamship Company to protect British national interests and maintain British crew manning on Cunard vessels. Mr. Davies said: 'I shall take into account in the usual way all relevant factors when considering what action, if any, I can and should take.'

FRIDAY, JULY 23

Hazardous or noxious cargoes

In reply to a question on proposals for regulating the carriage of hazardous or noxious cargoes with the aim of minimising the risks of spillage following a shipping casualty, Mr. Grant said that statutory control of the carriage of dangerous goods in ships was exercised through the Merchant Shipping (Dangerous Goods) Rule 1965 as amended by SI No. 332, 1968. The problem of pollution was one for multilateral solution through existing international organisations. Mr. Grant continued: 'HMG has been active in the Inter-Governmental Maritime Consultative Organisation which, in relation to very large oil tankers, has developed proposals for the limitation of tank sizes and in relation to new ships designed to carry chemicals in bulk, has completed a Code of safe construction. In all this work the basic concept has been one of safety of containment.'

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Government surplus sales

MINISTRY OF DEFENCE

SALES BY AUCTION

August 3-5, 1971 Miscellaneous Stores

Location: The Lido Hall, Worthy Lane, Winchester

Auctioneers: Richard Austin and Wyatt (Dept. L), 79 High Street, Fareham, Hants. (Tel. 0329 4211)

Various trailers; Bedford van; Bedford 900 gal. water tanker; Ford Anglias; Ford box van; Commer 1-ton van; electric and diesel fork-lift trucks; 70 mm. X-ray unit; galvanised steel piping; jerricans; photographic equipment; ball bearings; various safes and security boxes; binoculars; wrist watches; stop watches; wall and alarm clocks; machine tools; tradesman's tools; black PVC sheets 160 ft. × 90 ft.; electrical and telephone equipment; steel boiler tubes; wooden ammunition boxes; scrap metal; aluminium kitchenware; crockery and glassware; clothing; furniture; textiles; mixed rags, etcs.

August 11 Miscellaneous Stores

Location: Auctioneer's Premises

Auctioneers: Woolland Son & Manico (Dept. L), Kinterbury House, St. Andrew's Cross, Plymouth. (Tel. 0752 69292)

Carpets; greatcoats; duffel coats; trousers; blouses, jerseys; underwear; boots and shoes; blankets; sheets; curtains, cotton, wool and serge rags kitbags; tentage; mattresses; camp equipment; furniture including, fold-flat chairs; desks; bureaux, etc.; china, glass and kitchenware; binoculars; cameras; photographic equipment; compasses; watches; meters; gauges; valves; MT electrical spares; tyres; hydraulic jacks; 3½ kVA generating sets; drills; engraver; pipe bender; copper and nickel tubing, etc., and Coventry Climax Featherweight pumps.

September 1-2 Miscellaneous Stores

Location: TA & VR Centre, Meadowfirth Road, Stirling

Auctioneers: Dixon & Wallace Ltd. (Dept. L), Bank Building, Graham Square, Glasgow, E.1. (Tel. 041-554 2447)

Miscellaneous aircraft equipment and spares; charging sets; generating sets; industrial tractors; machine tools including, portable electric and pneumatic drills; hand tools; 5 cwt. to 2 ton geared chain blocks; saddles and harnessing; bulkhead and wall clocks; stop watches; binoculars; compasses; cameras and photographic equipment; MT spares; tyres; miscellaneous dry batteries; furniture including beds, tables, chairs, desks, etc.; textiles, carpets; blankets; rags; kitbags, etc.; large quantities of ex-CD clothing including blue webbing anklets, blouses and trousers, gaberdine raincoats, greatcoats, berets and combination overalls; khaki BD; denims; shirts; boots and shoes.

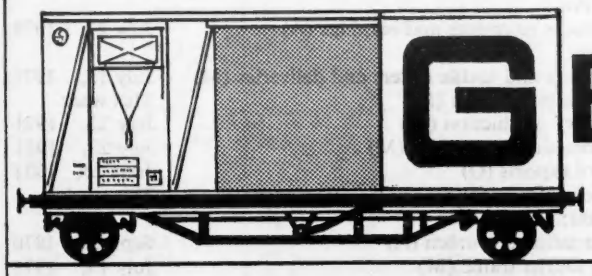
September 7 Miscellaneous Stores

Location: Regional Depot, Ordnance Support Unit, RAOC, Barlow, Nr. Selby, Yorks

Auctioneers: Bartle & Son (Dept. L), 52 Merrion Street, Leeds, LS2 8JH, Yorks. (Tel. 0532 20898)

Morris utility coach; Bedford 3-ton cargo truck; Rover 5-cwt. truck; kitchen equipment; clothing; textiles; furniture, etc.; machine tools, including grinding and polishing machine; various lathes; circular saws; shearing machine; planing and thicknessing machine; grinding and drilling machines and large quantities of other miscellaneous stores and equipment.

Catalogues of the above sales obtainable from relevant auctioneers about two weeks prior to and up to date of sale, price 5p (postal order only).



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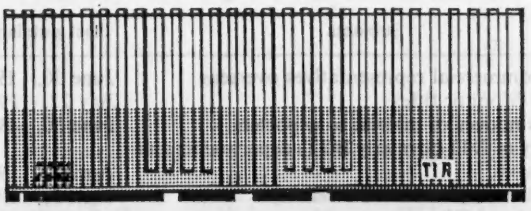

SERVICES

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STATISTICS

Index to statistics and organisational information published regularly in TRADE and INDUSTRY

A = annually; M = monthly; Q = quarterly; 6M = every six months.

All dates before October 21, 1970, refer to articles in the *Board of Trade Journal*

Title	Last published
Air transport:	
Aircraft noise at Heathrow and Gatwick airports (Q)	July 22, 1971
Air miss reports (A)	April 1, 1970
Mileage and traffic (A)	April 29, 1970
Trade by air (6-M)	Mar. 24, 1971
Balance of payments:	
Civil aviation (Q)	Oct. 28, 1970
Trends in invisible transactions (Q)	June 23, 1971
UK balance of payments (Q)	June 16, 1971
Bankruptcy orders (Q)	May 5, 1971
Business names registered (A)	Jan. 27, 1971
Capital expenditure:	
Distributive and service trades (A)	April 28, 1971
Industry's capital expenditure (Q)	July 15, 1971
Catering trades turnover (M)	July 15, 1971
Chemicals industry (Q)	May 26, 1971
Companies:	
Acquisitions and mergers (Q)	May 19, 1971
New companies registered:	
Gt. Britain (M)	July 15, 1971
N. Ireland (M)	July 8, 1971
Computers:	
UK computer market (Q)	June 2, 1971
Construction work overseas (A)	Oct. 14, 1970
Credit:	
Instalment credit business (M)	July 8, 1971
International trade credit (A)	April 14, 1971
ECGD business (Q)	June 9, 1971
Electronics capital equipment deliveries, research and development (Q)	June 23, 1971
Engineering and electrical goods:	
Deliveries and orders (M)	July 22, 1971
Film industry:	
British Film Fund Agency returns (M)	July 15, 1971
Cinema admissions and takings (M)	July 8, 1971
Overseas payment and earnings (A)	July 22, 1970
Registration of films (A)	Feb. 24, 1971
Trends in film going (A)	July 22, 1970
Food:	
Consumption levels (6-M)	July 15, 1971
Household consumption (Q)	July 15, 1971
Footwear industry production, orders and deliveries (M)	July 15, 1971
Foreign trade:	
EFTA trade (Q)	June 16, 1971
Industrial countries trade and production (Q)	May 12, 1971
World exports of manufacturers (A)	Sept. 30, 1970
Foreign trade of the UK:	
Direct exports (A)	April 14, 1971
Unit value and volume index nos. (M)	July 15, 1971
Value of overseas trade (M)	July 22, 1971
Value of overseas trade: analysis of trends (Q)	May 12, 1971
Gold and convertible currency reserves (M)	July 15, 1971
Hairdressing trades turnover (M)	July 15, 1971
Hire purchase business (M)	July 8, 1971
Industrial building (Q)	This week
Industrial development certificates refused (A)	July 15, 1971
Industrial production:	
Index nos. (M)	July 22, 1971
Industrial production:	
N. Ireland index (M)	This week
Wales index (Q)	June 30, 1971
Insurance companies assets (A)	Aug. 19, 1970
Investment:	
Book values of overseas direct investments (every 3 years)	Sept. 23, 1970
Industry's investment intentions (3 times a year)	June 16, 1971
Investment and earnings overseas (A)	April 7, 1971
Laundries and dry cleaners turnover (M)	July 15, 1971
Machine tools deliveries and orders (Q)	June 30, 1971
Man-made fibres:	
Analysis of production (Q)	June 2, 1971
Deliveries (Q)	June 2, 1971
Production (M)	July 15, 1971
Volume of production (M)	July 15, 1971
Motor industry:	
Car and commercial vehicle production (M)	June 30, 1971
Motor trades turnover (M)	July 15, 1971
Office development permits (Q)	June 2, 1971
Partnerships registered (A)	Jan. 27, 1971
Pension funds: assets (A)	Aug. 19, 1970
Retail prices index (M)	This week
Retail trades:	
Index nos. (M)	July 8, 1971
N. Ireland index (M)	July 22, 1971
Royalty transactions (A)	Mar. 31, 1971
Shipping:	
Nationality of vessels in UK sea-borne trade (A)	Feb. 10, 1971
Steel consumption (Q)	June 16, 1971
Stocks:	
Distributive and service trades (A)	April 28, 1971
Industry's stocks (Q)	July 15, 1971
Retail (M)	July 15, 1971
Television:	
Overseas payments and earnings (A)	July 27, 1970
Textiles:	
Clothing and textile orders and deliveries (M)	July 15, 1971
Cotton production (M)	This week
Hosiery production (M)	July 22, 1971
Wholesale houses sales (M)	July 22, 1971
Wool exports (Q)	June 23, 1971
Wool output (M)	This week
Tourism:	
International tourism (A)	Sept. 23, 1970
UK tourist traffic (M)	July 15, 1971
Wholesale prices:	
Average prices of selected commodities (A)	Feb. 24, 1971
Index nos. (M)	July 22, 1971

Dept. of Trade and Industry organisation, etc.

Subjects	Last published
British commercial representatives overseas	June 30, 1971
Business Monitor titles	July 22, 1971
Customs notices of interest to exporters	June 30, 1971
Directory of DTI (formerly BOT) departments and their work	April 8, 1970
DTI addresses (former BOT offices)	Mar. 3, 1971
DTI Regional Directors	Mar. 3, 1971
ECGD local offices	June 16, 1971
Index Jan.-Mar. 1971	May 26, 1971
Official receivers offices	May 20, 1970
Programme of trade promotions	July 22, 1971
Release dates of economic statistics	July 22, 1971

The economy: selected indicators

Series expressed as index numbers and seasonally adjusted except where shown otherwise

SYMBOLS USED IN ALL STATISTICAL TABLES—

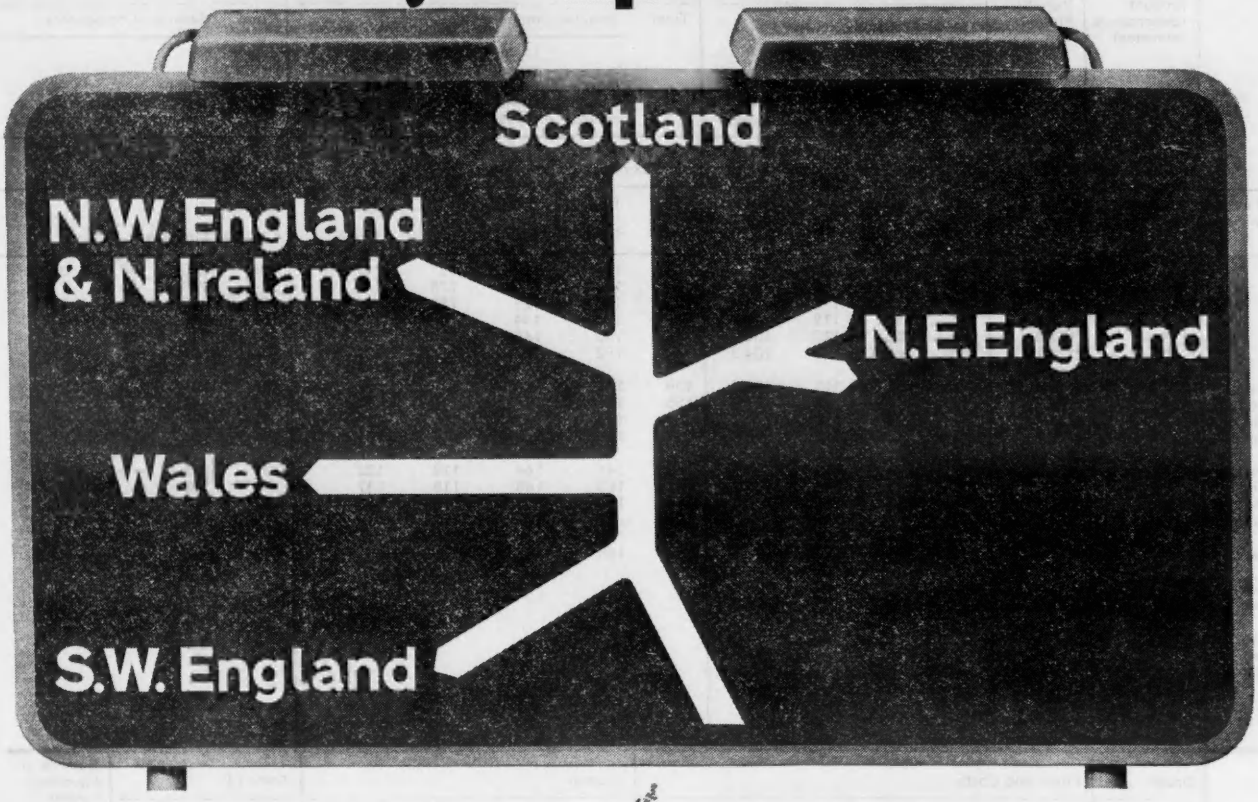
.. not available
~ nil or less than half the final digit shown
p provisional
r revised
* five week period
Ø fifty-three week period

	Gross Domestic Product (Expenditure estimates)	Index of Industrial Production	Consumers' Income and Expenditure				Fixed Capital Expenditure					Increase in Stocks			
							Total	Selected Components				Total	Selected Components		
			Personal disposable income	Total consumers' expenditure		Retail sales		Manufacturing industry	Distributive and service industries	Dwellings	Public sector excluding dwellings		Manufacturing industry	Wholesalers	Retailers
	at 1963 prices		at current prices		at 1963 prices	at 1966 prices	at 1963 prices					at 1963 prices			
Base of index £m. in base year	1963	1963	1963	1963	1963	1966	1963	1963	1963	1963	1963				
	26,758		21,758	20,087	20,087	11,372	4,907	1,070	994	944	1,752	Series in £ million			
1965	108	111.7	115	114	106	..	121	124	119	127	117	385	263	47	31
1966	110	113.2	122	121	108	100.0	124	128	115	128	125	254	143	25	17
1967	112	113.9	127	126	110	101.4	133	124	122	138	142	184	–37	13	22
1968	116	119.8	135	135	112	103.6	140	130	144	145	142	157	23	75	41
1969	118	122.9	143	143	113	103.0	136	140	148	130	131	357	232	26	27
1970	120	124.1	156	155	116	104.2	139	152	157	117	136	344	214	42	51
1969 1st qtr	115	121.8	140	138	111	102.3	134	128	138	134	136	96	105	6	5
2nd qtr	118	123.3	142	142	113	103.7	135	141	147	130	129	84	43	2	1
3rd qtr	119	123.2	144	144	113	103.2	138	146	155	130	130	51	—	8	8
4th qtr	120	123.5	147	147	114	102.9	138	146	153	126	131	126	84	10	13
1970 1st qtr	117	123.8	149	148	114	103.3	133	144	144	112	133	–31	32	–5	–41
2nd qtr	120	123.5	155	153	116	104.2	142	153	163	118	137	106	55	11	21
3rd qtr	120	124.3	159	158	117	104.6	139	154	156	119	133	117	40	6	12
4th qtr	122	124.6	163	161	118	104.7	122	157	167	119	139	152	87	31	60
1971 1st qtr	116	124.4	164	161	116	101.9	137	145	145			43	67	—	–75
1970 Nov		123.4				103.3									
Dec		125.0				104.9									
1971 Jan		126.8				102.7									
Feb		123.8				99.7									
Mar		122.7				103.0									
Apr		126.5				104.7									
May		124.6													

	Orders	Prices and Costs					Labour			Trade (§)		Balance of Payments current balance
	Engineering and electrical goods† orders on hand (end period)	Retail prices Index		Wholesale price index: non-food manufacturing industry		Basic hourly wage rates (all industries and services)	Wholly unemployed excluding school leavers	Unfilled vacancies for adults	Civil employment	Imports(‖)	Exports(¶)	
	at 1963 prices	Index‡	% increase on year earlier	Basic materials and fuel used‡	Manufactured products: home sales‡		Mid-month or monthly average		Quarter or quarterly average	at current prices		
Base of index £m in base year	Dec. 1963	16 Jan. 1962		1963	1963	31 Jan. 1956	Series in thousands			1963	1963	Series in £ million
										4,362	4,282	
1965	119	112.1	*4.8*	106.8	104.6	157.9	308	265	24,784	116	112	–77
1966	115	116.5	*3.9*	110.2	107.3	168.5	323	255	24,835	120	121	55
1967	106	119.4	*2.5*	108.4	108.2	175.3	512	174	24,476	130	120	–297
1968	106	125.0	*4.7*	120.5	112.4	187.3	541	188	24,331	159	146	–308
1969	117	131.8	*5.4*	125.0	115.9	197.4	535	200	24,304	165	165	437
1970	125	140.2	*6.4*	128.5	124.6	217.7	574	186	24,135	181	184	621
1969 2nd qtr	113	131.8	*5.4*	124.2	115.1	195.6	519	202	24,332	165	163	99
3rd qtr	115	132.0	*5.0*	126.1	116.5	197.8	547	200	24,285	165	171	166
4th qtr	117	133.7	*5.1*	127.3	118.0	201.6	544	199	24,249	169	172	162
1970 1st qtr	118	136.2	*5.0*	130.1	120.6	209.0	561	192	24,275	171	180	218
2nd qtr	122	139.5	*5.8*	129.2	123.6	214.0	563	187	24,138	183	183	147
3rd qtr	123	141.1	*6.9*	126.9	125.7	219.5	592	185	24,072	178	175	77
4th qtr	125	144.0	*7.7*	127.8	128.4	228.3	581	177	24,054	190	199	179
1971 1st qtr	121 p	147.9	*8.6*	131.2	131.7	237.5	631	146		189	186	77
2nd qtr				137.2 p	134.8 p	242.2 p	725	131		200 p	211 p	
1970 Dec	125	145.0	*7.9*	128.5	129.1	233.3	589	171		186	204	
1972 Jan	122 p	147.0	*8.5*	129.8	130.7	237.1	613	157		174	175	
Feb	119 p	147.8	*8.5*	130.6	131.6	237.4	623	147		187	172	
Mar	121 p	149.0	*8.8*	132.2	132.6	238.1	656	134		207	211	
Apr	117 p	152.2	*9.4*	137.2	134.0	239.2	704	129		201 p	209 p	
May	115 p	153.2	*9.8*	137.3 p	135.0 p	242.5	731	130		195 p	206 p	
Jun				136.9 p	135.4 p	244.8 p	740	133		203 p	218 p	
Jul.							788 p	122 p				

(†) New series covering SIC Orders VII-IX; previous series also included part of Order XI. (‡) Not seasonally adjusted
(§) On a balance of payments basis. (‖) Includes payments for United States military aircraft and other balance of payments adjustments
(¶) Includes balance of payments adjustments and allowances for factors affecting recording

Today the Areas for Expansion are just up the road



If you think that the Areas for Expansion are at the back of beyond, you need to catch up with the new situation created by transport developments in recent years. For example – Glasgow, Newcastle, Cardiff and Liverpool are now all within easy reach of London by motorway or Inter City rail services. Just check the journey times.

So a separate works in one of these Areas need not mean managers being away from their normal bases for long spells nor problems in supplying customers promptly. These Areas consist of the Development Areas, the Special Development Areas, the Intermediate Areas and Northern Ireland.

Freightliner services, roll-on and roll-off shipping and container services have also transformed the movement of goods to and from the Areas for Expansion–and the less congested local roads which link them to the motorways, railways, seaports and airports give a further advantage.

Other benefits to be gained from these Areas include plenty of room to expand, readily available labour and cash grants. With so many incentives your company could be well placed to achieve its aims for future growth – just by moving up the road.

For more information on the Areas for Expansion get in touch with us at "Industrial Expansion" at the Department of Trade and Industry. We aim to provide industrialists with the impartial help they need in finding the right location for a successful project.

Filling in the coupon is all you need do to start getting the facts at your fingertips. Why not do it now? Or telephone 01-222 7877 Ext 3333.

Certain areas hitherto designated as Development Areas have now been made Special Development Areas and a few new areas have been given Intermediate Area status.

Post to: Industrial Expansion, (TIJ17) Department of Trade & Industry, 1 Victoria Street, London, S.W.1.

Please send me literature describing the benefits available in the Areas for Expansion.

Name_____

Position in Company_____

Company_____

Nature of Business_____

Address_____

_____

Get the facts from the Department of Trade & Industry

new technology

Number 48 July 1971 A supplement to *Trade and Industry*

'O Earth, So Full of Dreary Noises!'

NEL's Noise and Vibration Section Offers a Service to Industry

Preamble

'DON'T the church bells sound beautiful!' 'Pardon?' 'The church bells—don't they sound beautiful!' 'Pardon?' *'DON'T THE BELLS SOUND BEAUTIFUL!' 'SORRY, I CAN'T HEAR A DAMN THING FOR THOSE BLASTED BELLS!*... So the story goes. Beauty is in the ear of the listener, and one man's music is another man's din. All too often, however, noise is noise and nothing but noise. Factory machinery, jet aircraft, town traffic, railways, typewriters: the list of noise generators is interminable. Machinery is undoubtedly the main—if not the sole—culprit, and restrictions on emission of noise from this source will undoubtedly become increasingly stringent.

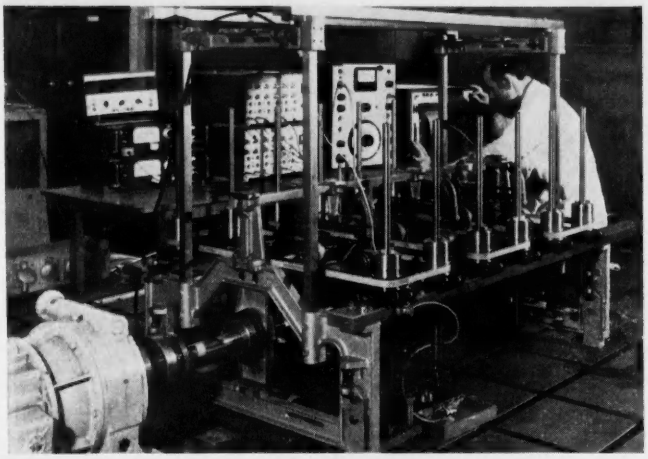
Restrictions will be imposed in various ways: by legislation, by agreement between relevant parties (for instance, via standard specifications or trade union contracts), or by commercial pressures. For example, internal quietness can be featured as a selling point in a motor car, whereas the noise it makes externally is often governed by legislation. Legislation on noise already exists in the UK (in general the onus is on proving a 'public nuisance', but the law is specific on motor-vehicle noise), and certain overseas countries have also imposed legislative requirements to which exporters of such products as agricultural machinery, machine tools and vehicles will, of course, have to conform. Both in the UK and abroad, moreover, individual manufacturers, irrespective of whether legislation exists or not, are specifying their own noise limits for workshop machinery—a trend which is being stimulated by agreements with trades unions stipulating the payment of 'noisy money' should workshop noise exceed a predetermined level. Intensive research into the establishment of noise criteria has been in progress for a long time, and nothing is more certain than that, over the next few years, many internationally agreed noise-level limits will be incorporated in standard specifications and subsequently in mandatory legislation. These requirements will demand a different approach to the design and development of new machinery, and, of course, modifications to existing units.

Noise consists of audible air-borne vibrations: hence the indictment of machinery as the principal generator of noise. Vibration and noise are intimately related. Vibration, however, poses its own problems. The trend towards development of machinery with higher ratings, capable of operating at greater speeds and loads, has confronted the engineer with increasingly complex vibration effects and failures, especially where the machinery is installed in intricate structures. Another problem is the transmission of ground-borne vibrations from industrial premises to residential areas—an effect which is not always easy to avoid or eliminate. And, of course, vibrations can have an influence on the human body: people adversely affected by low-frequency oscillations become sea- or travel-sick; a bumpy ride in a car or train can, to say the least, cause discomfort; working with vibratory or impacting power tools, or even riding motorcycles, can damage fingers, hand or arm; and certain types of vibration can produce blurred vision. Much research into the effects of vibration on human behaviour has been carried out, but much remains to be done to determine realistic criteria against which to evaluate these phenomena. Nevertheless, progress is being made: for example, various organisations, including British Rail, have already established criteria for 'ride comfort' in trains and road vehicles; the National Engineering Laboratory has developed a vibrator for determining the threshold of feeling of the fingertip in research into Renaud's disease (white-finger syndrome), one of the complaints which may occur through handling vibrating power tools; and two overseas countries have specified vibration limits for tractor seats. As in the case of noise, the burden of meeting any limitations on vibration levels will lie with the design and development engineer, and, though legislation is further off than for noise, customer preference for the quieter, smoother-running machine is proving an influential market force. To uprate machinery whilst reducing environmental vibration will, however, obviously require extremely sophisticated engineering.

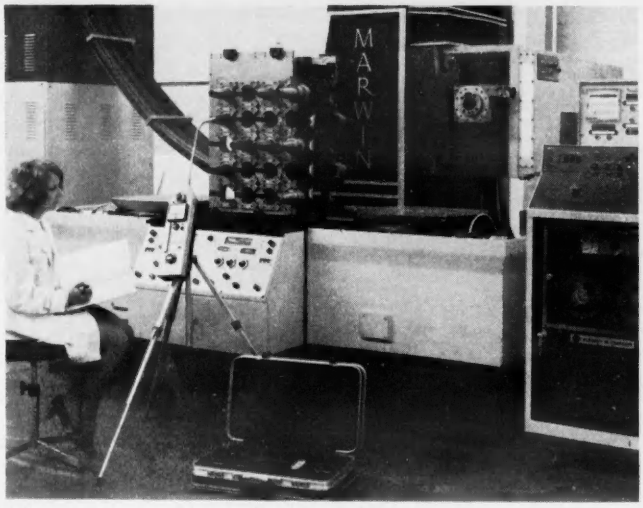
NEL's facilities for noise and vibration investigations

Where can the engineer seek aid in measuring, analysing and overcoming noise and vibration? One organisation with great experience in this field, and which offers industry and local government a comprehensive testing, design and advisory service, is the National Engineering Laboratory, East Kilbride. The noise and vibration problems dealt with by NEL relate broadly to the following: general machinery; hydraulic systems; pumps and fans; environmental noise in offices, workshops, industrial plant and residential areas; isolation and reduction of vibration; machinery failures; design consultancy; prototype development. Work for clients is carried out on a repayment basis, and reports are absolutely confidential.

NEL's facilities for noise and vibration measurement and analysis—on-site or in the laboratory—are substantial. The equipment available for noise investigations includes: three anechoic chambers ($4.8\times4.8\times5.4$ m, $2.3\times2.9\times2.6$ m and $3\times2.9\times2.6$ m in dimension); rigs for in-duct noise measurement of fans and pumps; instrumentation for precision noise-level measurement (octave, one-third-octave and fine-frequency analysis); tape-recording facilities; tracking filters



Vibration test and recording rig at NEL.



NEL measures machine-tool noise on site.

(enabling, for example, a varying shaft speed to be followed); signal generators for pure, square-wave and warble tone; random and white-noise generators; and an auto- and cross-correlator (the correlation technique can be used also for transmission-path tracing). Line-pressure variations in high-pressure hydraulic systems, and hydraulic noise due to turbulence effects, can be detected and measured.

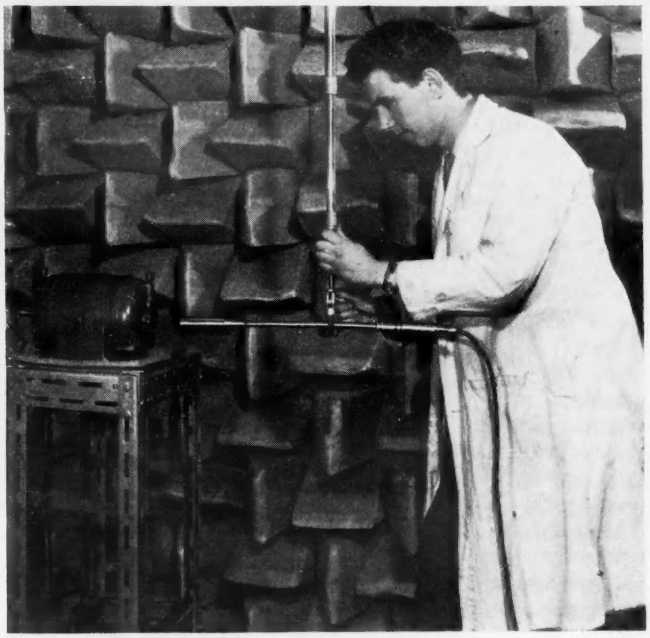
For vibration measurements NEL has a variety of systems at its disposal. Transducers include strain gauges, pressure pick-ups, accelerometers for linear and torsional measurements, and non-contacting proximity probes—the choice of the most suitable instrument for a particular application being governed by such factors as the class of measurement, the sensitivity and the frequency range. Signal-conditioning equipment includes carrier AC and DC amplifiers capable of recording on to UV or tape, the maximum frequency (DC-40 kHz) depending on the recording method. All the equipment is portable, and may be either battery- or mains-operated.

The Laboratory's noise and vibration facilities are versatile enough to allow tests to be carried out in virtually any location, and in fact NEL staff have worked on sites as diverse as ships, factories, offices, gun ranges, and oil-refinery, chemical and cement-manufacturing plants.

Types of work undertaken

The range of work which NEL can undertake for industry is wide. Environmental investigations have included measurement of ground-borne vibration and noise at sites for a computer installation and for a Glasgow Corporation cultural centre, measurement of noise generated in residential areas by adjacent railways and cargo terminals, abatement of noise in offices, foundries and workshops, and reduction of noise from press-tool operations and in gear drives. Performance and noise output have been determined for such units as electric motors, fluorescent-lamp fittings, computer teletypes, food mixers, fans, pumps, hydraulic pumps and valves, and machine tools.

With regard to vibration, NEL can calibrate high-pressure pick-ups and transducers for measuring linear and torsional vibration, and has made measurements on machinery foundations, buildings, cement mills and kilns (starting and running conditions have been determined to compare actual service conditions with specifications), and tractors and similar machinery. This vibration work involves, of course, study of such associated aspects as component failure, noise generation, vibration isolation, physiological and environmental effects, and balancing.



Measurement of noise from an industrial electric motor.

Back-up services

NEL's computer programs for calculation of the resonant frequencies of multi-mass and branched systems have proved their worth in elucidating the modes of vibration of textile machinery, and in studying the whirling of rotors and shafts, whether built-up or solid. Other statistical programs exist for correlating noise characteristics and distribution with some such variable as gear-tooth error. Identifying the factors responsible for noise and vibration in industrial equipment is, however, only a step towards improving design and increasing the efficiency of machine and machine operator. To this end, NEL has produced designs for low-noise higher-efficiency fans, pumps and hydraulic machinery, or has, where redesign is not feasible, sought to achieve the same aim by employing alternative materials of construction or improving machinery operation. Support for the Noise and Vibration Section comes from NEL's computer-aided design and graphics programs, its NC programming facilities, its fluid-bearing design and development, and its Metrology Services Section, all of which can be called upon for assistance in designing or modifying equipment to reduce noise and vibration and increase efficiency.

More information: Mr. H. A. G. Fletcher, Special Projects Division, National Engineering Laboratory, East Kilbride, Glasgow. Tel: East Kilbride 20222.

Holography in an Engineering Environment

by J. D. Redman

Atomic Weapons Research Establishment, Aldermaston

At one time holography had to be done under carefully controlled conditions in a dark laboratory, and even talking during a holographic exposure was frowned upon. The art has progressed considerably since then, but the news that AWRE has succeeded in carrying out holographic interferometry under normal working conditions in a shipyard has nevertheless been greeted with surprise and even incredulity by some workers in the field. This article reviews the problems involved in making holograms, and describes how the interferometry work in such a 'hostile' environment as a shipyard was successfully carried through using a ruby laser developed at AWRE.

The difficulties

The most usual way of making holograms is, of course, to employ a continuous-wave laser with an output of between 1 and 100 milliwatts. The laser light is split into two beams (eg, by means of a partially silvered mirror), and one of the beams is then directed at the object, and thence scattered towards a photographic plate, while the other is allowed to fall directly on to the plate. When the plate is developed and illuminated by a replica of the reference beam, the light scattered by the object is reconstructed, so producing an image of the object in truly three-dimensional form.

Using double exposures it is possible to reconstruct two wavefronts simultaneously, and hence to make interferometric comparisons between them. For example, if an object moves between exposures, the relative movement is visible as a fringe pattern when the hologram is reconstructed, and, consequently, if an object is strained between exposures, defects are revealed as anomalous patterns. These patterns are usually easy to identify, and enable the location of the defect to be determined. Displacement anomalies of as little as 0.1 μm can be detected, and, once a fault has been located, it can, if required, be further investigated by more conventional techniques. The holographic technique is of course non-contacting, and is applicable to all normal surfaces (see, for instance, Fig. 1).

Since it requires no detailed fringe interpretation, flaw detection is obviously a particularly attractive application of holography, but it does pose some practical problems in an actual engineering environment. One of the main problems arises from the high level of vibration usually found in engineering workshops. There are, after all, very stringent limits on the amount of movement which can be tolerated during a holographic exposure, since any change in the optical path from the laser to the hologram plate reduces the intensity of the holographic reconstruction. If, for example, we assume that optical paths change at a constant rate, Fig. 2 shows that a change in wavelength of one eighth corresponds to a reduction in intensity of about 5 per cent. It is more difficult to put a tolerance on movement *between* exposures, since the effect depends partly on the geometrical arrangement but much more on the type of movement. Rotation about an axis in the surface is most troublesome, and must typically be kept below about 7×10^{-4} radians, but simple translational movement is more acceptable and its main effect is to make photography of the final results more difficult.

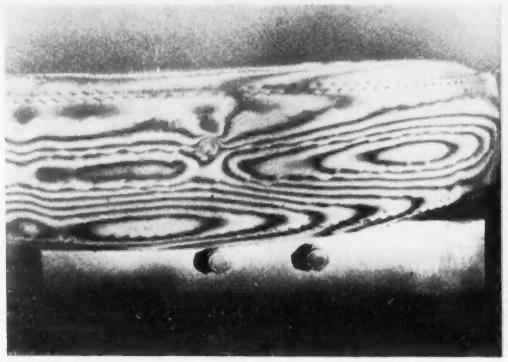


Fig. 1. Double-exposure hologram of a car tyre.

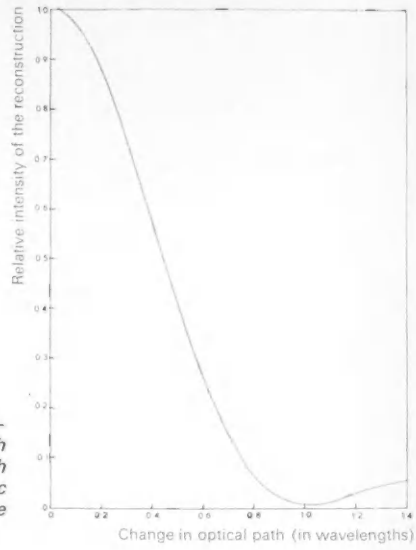


Fig. 2. Variation in reconstruction intensity with change in optical path during a holographic exposure, assuming the change is linear.

Thermal air currents are also a hindrance to practical holography, producing variations in optical path from exposure to exposure, and so distorting fringe patterns and making flaw detection difficult.

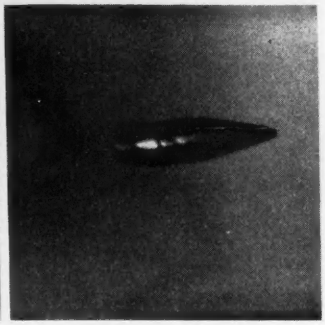
Holography in a shipyard workshop

The Applied Physics Division at AWRE was confronted with all these problems when allotted the task of making double-exposure holograms of part of a large pressure vessel in the shipyard heavy-engineering workshop already referred to above. The holograms had to be made in the course of a hydraulic pressure test, during which normal heavy-engineering activities would be going on in the neighbourhood; and the task was made more difficult by the fact that the vessel was to be heated by gas burners immediately before the exercise.

Had we had only a continuous-wave laser at our disposal, the high ambient vibration levels, which would have produced unacceptably large changes in optical path during the several seconds' exposure required, would have rendered holography impossible. Fortunately, we had recently discovered that quite simple modifications to one of our ruby lasers made it sufficiently coherent for holography. The modified laser was capable of delivering about 50 millijoules of energy in about 30 nanoseconds (it was Q-switched using a passive dye), and, with such a short exposure time, mechanical stability no longer posed a problem and there was no difficulty in making a single-exposure hologram. However the laser had to be allowed to cool down for three minutes after each exposure, and the presence of thermal air currents between exposures could still therefore represent a source of interference. One minor practical problem—how to exclude ambient light from

Fig. 3. Double-exposure hologram of a pressure vessel during hydraulic pressure testing.

Fig. 4. Hologram of a bullet travelling at 3,000 ft./sec.



the hologram-making apparatus—was finally solved by using a light-proof tent connected to the pressure vessel by a shaped hardboard tunnel.

Figure 3, which is a photograph of the reconstruction from a double-exposure hologram, illustrates the results obtained. The pressure change between exposures was 100 lb/in^2. The scale may be deduced from the three crosses marked on the vessel wall, the distance between the middle and upper crosses being 7.5 cm. The basic, approximately horizontal, fringe pattern is due to a vertical movement of the vessel, together with a small amount of bowing outwards relative to a stiff region in the lower part of the field. The coarse shadowy structure can be ascribed to slight errors in the alignment of an aperture in the laser cavity, the main effect being to reduce the illumination of parts of the vessel.

Clearly, considerable advantages accrue from using even a very modest pulsed laser such as ours. The stability requirement can be greatly relaxed, and holograms can therefore be made cheaply, quickly and without disrupting other activities in the vicinity. Obviously room exists for some improvement in the pulsed laser. There is, however, no very pressing need to reduce pulse length, since objects travelling at a speed as high as 3,000 ft/sec have been holographed with the existing pulse length (see Fig. 4). Pulse repeatability has likewise been shown to be good enough to avoid spurious fringes in most practical situations. Energy could, however, be usefully increased to enable larger objects to be accommodated. Notwithstanding it can be validly claimed that pulsed holography is already a practical non-destructive testing technique.

More information: Mr. J. D. Redman, Applied Physics Division, Atomic Weapons Research Establishment, Aldermaston, Reading RG7 4PR. Tel: Tadley 4111.

First National Low Cost Automation Exhibition

The Exhibition—to be held at Belle Vue, Manchester, from November 15 to 19, 1971—will be user-oriented. In the past, manufacturers of low-cost automation systems and products have found it difficult to reach users except through the medium of exhibitions dealing with a particular process-control or handling technique rather than with the whole range of production problems encountered by the individual engineer; and consequently the production engineer has found it difficult to keep abreast of advances in the field. At the Belle Vue Exhibition visitors will be able, for the first time, to put their problems to experts in all the techniques of process control applicable to their own operations, and to choose the solution best suiting their existing manufacturing methods. In addition to the many commercial exhibitors, DTI's Low Cost Automation Centres—the pioneers of the user-oriented approach—will be represented at the Exhibition.

More information: Mr. H. Barton, Exhibitions for Industry Ltd., 157 Station Road East, Oxted, Surrey. Tel: Oxted 4371.

NIFES:
The Solution to Your Burning Problems

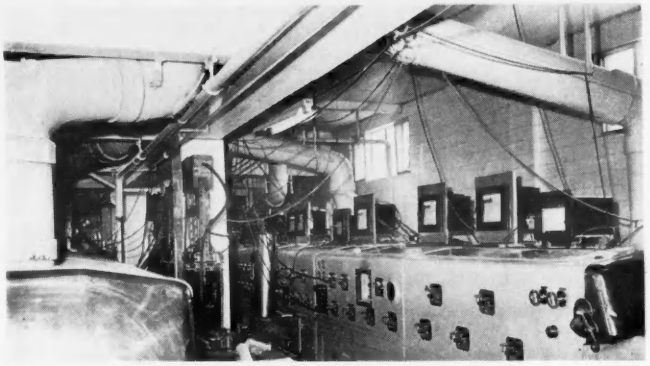
by H. Brown

Marketing Manager, National Industrial Fuel Efficiency Service

THE massive natural-gas deposits, and what are likely to be the equally massive oil fields, discovered in the North Sea will obviously contribute greatly to the economic health of the nation, but their significance has sometimes tended to be looked at through a somewhat euphoristic roseate glow. The finds should not, of course, be depreciated. They must, nevertheless, be viewed in the context of the rapid increase in the demand for energy and the fact that the UK will continue to depend for most of its oil supplies on the overseas producing countries: one forecast is that annual output of oil from the North Sea, including Norwegian waters, may amount to 50 million tons—equivalent to about the annual increase in Europe's oil consumption. The overseas producers have been successfully agitating for higher prices on the basis that their oil reserves are not limitless, and that profits must therefore be maximised before the deposits run out. The price of oil is hence certainly not going to decrease in the foreseeable future. The contraction of the UK coal industry has also created problems, and there is, for example, still a shortage of certain types of coal. The point I am making is that fuel conservation is becoming of increasingly vital importance, both to the country as a whole and to the individual firm: to the country because any decrease in the growth of demand will be reflected in the balance of payments; to the individual firm because any method of improving fuel efficiency is also one of increasing profits. All too often, however, a firm looks upon fuel costs and their gradual increase as one of the inevitable facts of life, about which it can do nothing. This is the background against which, in 1954, the National Industrial Fuel Efficiency Service was set up to encourage in industry and commerce an awareness of the importance of efficient fuel utilisation and to advise individual firms and organisations on methods of using their fuel to maximum advantage. Some indication of the need NIFES is fulfilling can be gained from the fact that, since its foundation, its engineers have devoted some 330,000 man-days of fee-earning work to advising fuel users, and have trained 16,000 men in industry and the public services to operate, maintain and use plant more efficiently. It has been estimated that each man-day spent on fuel-efficiency investigations has provided scope for, on average, a saving of 20 tons of coal (or its equivalent in other fuels) per annum, much of which is cumulative from year to year.

NIFES—a non-profit-making concern—has been supported to date by a Government grant-in-aid, but is making good progress towards its objective of becoming self-supporting by March 1972, when the grant is due to end. NIFES has a staff of more than 150 professional engineers and technical assistants, operating from 11 area offices throughout the United Kingdom. It places great emphasis on close personal contact with clients and on ensuring that the guidance provided is based on specialised knowledge of the character of local industry. Since NIFES is completely independent, the advice given is, of course, entirely impartial.

An instrument store in a NIFES Area office.



Instrumentation used to study the baking process in a town's-gas-fired oven at Avana Bakery Ltd., Rogerstone, who are major suppliers of bakery products to Marks and Spencer Ltd.

NIFES operates three basic services:

1 Instrumentation and Energy Surveys

The surveys can cover anything from a single item of plant to the entire facilities of a large integrated works. Data on such variables as flow, pressure, temperature, gas composition and energy consumption are determined over periods ranging from hours to weeks, and these data, coupled with other observations, provide the basis for an authoritative report by NIFES' engineer.

The surveys may cover plant modifications needed to increase throughput or improve quality, complete works studies laying the foundation for future development programmes, or comparative tests enabling decisions to be made on capital expenditure. The task may be to assess a fuel policy for a works or to provide a comprehensive cost analysis for management accountants, and practically every subject relating, directly or indirectly, to energy usage can be dealt with, including, for instance: steam generation and utilisation; conversion of plant to alternative fuel and/or combustion equipment; waste-heat recovery; drying and heat processing of materials; metallurgical furnaces, kilns and lehrs; compressed-air utilisation; water contamination and treatment, and corrosion problems; noise measurement; environmental control; grit and dust measurement and control; refuse incineration.

In many cases NIFES' services are retained under annual contract, enabling the client to obtain advice and help as problems arise. A senior member of NIFES' staff is assigned to each contract client, so that, when necessary, NIFES' resources can be brought into play by someone with intimate knowledge of the client's activities and requirements; and, of course, this arrangement also permits the client to use NIFES' resources as a means of extending his own internal research or factory services at comparatively low cost. Clients come from virtually every field of industry and commerce: ceramics; brick and glass; chemicals; iron and steel; engineering; textiles and leather; food, drink and tobacco; paper and printing; various manufacturing industries; commercial premises; public and local authorities. In NIFES' 17 years' existence over 8,500 clients have availed themselves of its consultancy and other services, and some 500 client firms have annual contracts.

2 Design Engineering

Consulting engineering and design engineering now make up a major part of NIFES' activities. A complete consultancy service is available, ranging from appraisal of the merits of various schemes, through all the phases of design and tendering, to supervision of plant erection, but the service can, of course, be adapted as required to the client's wishes and resources. Projects in which NIFES has been involved as design consultants have included schools, large administrative buildings, public buildings, factories, chemical process plant, power-generation plant, sub-stations and heavy electrical installations, municipal and industrial refuse incinerators, and large furnace installations.

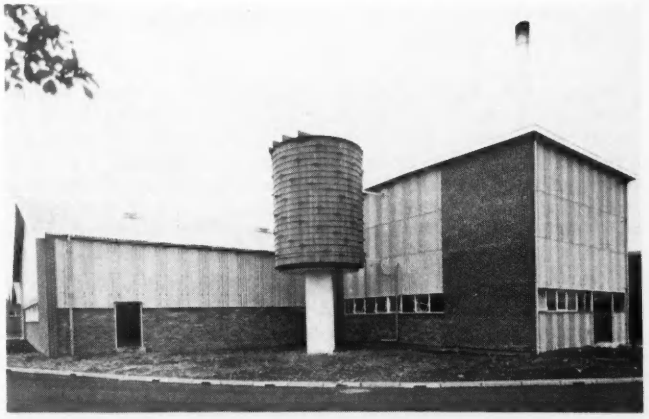
The knowledge and experience gained by NIFES in its survey and testing work provide an ideal 'feedback' for design, and the close liaison between staff working in the survey and the design fields ensure that practical field experience is turned to good effect on the drawing board, so minimising maintenance and labour costs.

3 Commissioning and Testing

In the production industries delay in getting plant on stream can interfere with scheduled output, postpone return on capital expenditure, and adversely affect company profits. Similarly, in the public sector delays in commissioning large projects (eg hospitals) can lead to serious increases in expenditure and repercussions on the community at large. A manufacturer is often forced to accept engineering plant falling short of the required standards simply because of the difficulties and expense of rectifying mistakes revealed only when the plant is operational, and the consequence is substandard performance and high maintenance costs throughout the entire life of the plant.

NIFES' experience in field testing enables it to offer a comprehensive commissioning and testing service—available both to the client and to the contractor—which will ensure that new plant complies with the original specification. The service provides actual data on plant performance on start-up, and can also cover such facets as the balancing of complex air systems and LPHW and chilled-water supplies, and the setting of controls to achieve optimum performance. In a word, the aim is to convert a static piece of equipment into a working unit meeting the design criteria. The service has proved its worth on many occasions, both in avoiding commissioning delays and in eliminating teething problems during

The boiler house at T. Forsell & Son Ltd., Leicester, worsted-yarn spinners. NIFES designed the steam, water and electrical services for the dye house.



the subsequent maintenance period. In NIFES' view such investigations could well be included in the specifications for all new factories and public buildings: after all it seems only logical, considering the high cost of the buildings and capital equipment involved, that plant should be certified as 'fully operational' before the bills are paid.

SOME CASE HISTORIES

* Consulted by the Plant Services Manager of the Rectifier Division of Standard Telephones and Cables Ltd., Harlow, who was concerned that the HPHW plant supplying process and space-heating requirements was not functioning to design conditions, NIFES checked the installation under summer and winter conditions and found it badly out of balance. Apart from ensuring adequate space heating throughout the factory, NIFES' adjustments and modifications contributed to a reduction of £3,000 in annual fuel costs, and, by reducing pumping requirements and improving boiler availability for maintenance, saved some £600 per annum in electrical costs.

* A. Wander Ltd., Kings Langley, manufacturers of *Ovaltine* and other malt products, have been clients of NIFES for more than 10 years. Initially concerned with smoke problems and boiler-operator training, NIFES later conducted a major survey of all the firm's steam plant, which showed that savings of at least 23 per cent could be achieved by plant improvements. Over the last six years the changes put into effect have contributed to a reduction of some £31,000 per annum in fuel costs.

* Consulted by a UK firm of bacon and ham curers about the feasibility of recovering heat from the exhaust gases of its bacon-singeing plant, NIFES designed and installed a heat exchanger capable of generating 800 gal of hot water per hour. For a capital cost, including that of a new canopy and chimney, of £1,300, the heat-recovery plant is saving some £300 per annum, based on a running time of 30 hours per week.

* Asked by a works manufacturing glazed tiles and sanitary ware to make a study of energy costs, to establish whether worthwhile savings could be made by modernising the drying plant, NIFES demonstrated that hot-floor drying could be replaced by continuous tunnel driers, enabling the process to be mechanised and automated and drying costs to be reduced by 50 per cent. Operational adjustments to the continuous kiln decreased fuel costs by 22 per cent; and, since this saving alone exceeded the fees for the survey, the cost of the whole investigation was recovered before NIFES staff had left the site.

* S. Lyles, Sons & Co. Ltd., carpet spinners and dyers of Dewsbury, Yorkshire, commissioned NIFES to design, and supervise the installation of, a new boiler system capable of meeting present load requirements and of being extended to meet future ones. Taking into account direct and indirect labour costs, repairs and capital-depreciation charges, the new system has lowered the cost of steam production per 1,000 lb. of evaporation by some 15 per cent.

* Selectus Ltd., Stoke-on-Trent, manufacturers of nylon ribbon, are regular clients of NIFES. When an extension to the firm's mill was planned, NIFES was asked to design new plant for the whole mill, making use of the existing mechanical stokers. Annual fuel consumption has been reduced by 20 per cent on a previous annual usage of 500 tons.

* Faced with a need for more steam, particularly at higher pressures, Durham Chemicals Ltd., manufacturers of heavy chemicals, consulted NIFES. On NIFES' recommendation an entirely new boiler was installed, which, costing £17,000 (including electrical and civil engineering work), has increased steam production by 22 per cent and reduced unit fuel costs by 15 per cent—a saving of £8,000 per annum.

NIFES OFFICES

Northern Area

NIFES House,
Sinderland Road,
Broadheath,
Altrincham, Cheshire
Tel: 061-928 5791

20/22 St. Paul's Street,
Leeds LS1 2QE
Tel: 0532 20046

44a Great North Road,
Newcastle upon Tyne NE2 4HA
Tel: 0632 813776

6 Park Terrace,
Glasgow C.3
Tel: 041-332 2453

49 Meadowside,
Dundee DD1 1EQ
Tel: 0382 22179

Midland Area

26 Calthorpe Road,
Edgbaston,
Birmingham B15 1RP
Tel: 021-454 4471

Wellington House,
190 Derby Road,
Nottingham NG7 1NR
Tel: 0602 44753

88 Cathedral Road,
Cardiff, CF1 9LN
Tel: 0222 33825

Southern Area

54/58 Bartholomew Close,
London EC1A 7HD
Tel: 01-606 5906

Buying and selling brains

'Britain must export its research skills', said Mr. Nicholas Ridley, Parliamentary Under Secretary of State, Department of Trade and Industry, speaking at the Silver Jubilee Celebrations of the Fulmer (metallurgical) Research Institute.

'We have not yet announced plans for the Government's contribution to the national research effort. It is a complicated and difficult subject, and one which I am sure it would be wrong to try to solve in a hurry. It must be got right.

'We are impressed by Fulmer and what has been done here. Fulmer does not receive a Government grant. It operates as a profitable concern, selling its wares in this and other countries: 20-25 per cent of its income comes from abroad. It persuades people to pay for all the work it undertakes. Research of this sort is definitely a marketable commodity.

'The fact that the Government is one of its customers—indeed the Government pays for 40 per cent of its work, so it is a very big customer—does not mean that it is subsidised. We place work here because we want it done.

'One hopes in the future to see Government laboratories move in the same direction—exporting their skills round the world, and drawing an ever-increasing proportion of their income from contract work. One notes how contract research work has flourished in the United States, and how the United States has flourished on contract work. Applied research should be directed to solving a particular problem—whether in industry or in every-day life. What seems to me important is that the people with the problems should be the ones deciding what particular lines of research are to be followed. It is better still if they are prepared to back it with cash. Perhaps I should be referring to development—not applied research. In any event, what I am saying is not meant to apply to pure research, where man tries to find out natural truths without having any commercial application in mind. Perhaps this is the area which is the true responsibility of Government.

'In saying all this, I do of course recognise that, in practice, clear-cut boundaries between pure and applied research do not in general exist; indeed, all sponsored research laboratories would claim that they have to devote some of their effort to unsponsored exploratory work in order to keep ahead of their customers if the rest of their resources are to be employed profitably.

'Industry is getting more and more inter-dependent. No one country manufactures all machine tools; in fact each firm specialises in a particular part of the market. So with research. No one country can be in the forefront of all research, and we must sell the products of our brains and buy the products of others.'

Reflectivity of Highly-Absorbing Solids at Submillimetre Wavelengths

New NPL Interferometric Technique Particularly Applicable to Semiconductors

by J. R. Birch and C. C. Bradley, Division of Electrical Science, National Physical Laboratory

USING an instrument (see Fig. 1) based on the Modular Michelson Interferometer†, the submillimetre group of NPL's Division of Electrical Science has developed a technique for measuring the reflectivity of highly-absorbing solids and liquids in the wavelength range 3000 to 25 μm (3.3 cm^{-1} to 400 cm^{-1}). The facility is at the disposal of any organisation interested in establishing such data (it has already been used by two concerns outside NPL), and the measurements can be made either by NPL staff on behalf of the organisation or by the organisation itself.

The technique is expected to find particular application in the semiconductor field, since many of the electronic properties of semiconductors (eg, carrier density N, effective mass m^*, and lattice low-frequency dielectric constant ϵ) can be determined from far infra-red reflectivity measurements. Their reflection spectra in this wavelength region are generally dominated by two features—the plasma and transverse optical phonon resonances—which can be described by simple classical formulae to provide values for N/m^* and ϵ. The outstanding advantage of the technique is that it is non-destructive and enables the measurement to be carried out without contact with the specimen (conventional methods, such as Hall and electrical-conductivity measurements, require soldered contacts and samples of specific geometry), and these characteristics are, of course, of particular value in the case of epitaxially grown materials such as gallium arsenide and indium phosphide. At present, measurements can be made at room temperature (300 K) and at liquid-nitrogen temperatures (77 K), but work is in progress to extend the technique's scope to lower temperatures and to add a magnetic-field capability.

The reflectivity measurements are made for normal incidence, and, although this procedure incurs a penalty in terms of signal-to-noise ratio, use of the recently developed phase-modulation techniques, together with liquid-helium-cooled photoconductive and bolometric detectors, ensures that good spectra are obtained in a short time. The data summarised in Fig. 2 were, for example, obtained from a series of four runs taking only three hours to observe. However, sample size is important in this respect, and for best results samples at least 5 mm in diameter are desirable.

In addition to this broad-band reflectivity technique, NPL has developed a new submillimetre cyclotron resonance spectrometer enabling resonance experiments to be conducted at 77 K (using 337 μm laser radiation and a pulsed magnetic field of up to 10 Tesla) and permitting materials with carrier relaxation times as small as 3×10^{-13} sec to be studied and carrier effective masses up to 0.3 of the electron mass to be determined.

NPL also, of course, has available comprehensive facilities for measuring absorption and refraction of less strong absorbers in the submillimetre-wave region.

More information: Mr. J. R. Birch or Dr. C. C. Bradley, Division of Electrical Science, National Physical Laboratory, Teddington, Middlesex. Tel: 01-977 3222.

† The NPL Modular Michelson Interferometer is manufactured by Sir Howard Grubb, Parsons & Co. Ltd., Walkergate, Newcastle upon Tyne 6.

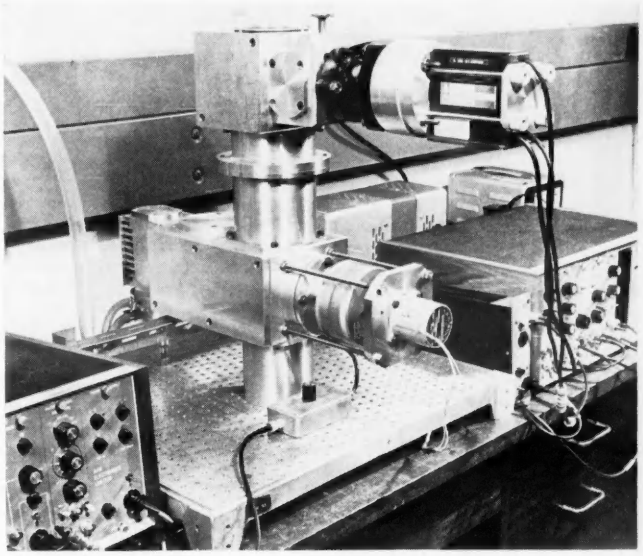


Fig. 1. NPL apparatus for measurement of the reflectivity of highly absorbing materials at wavelengths of 3,000 to 25 μm.

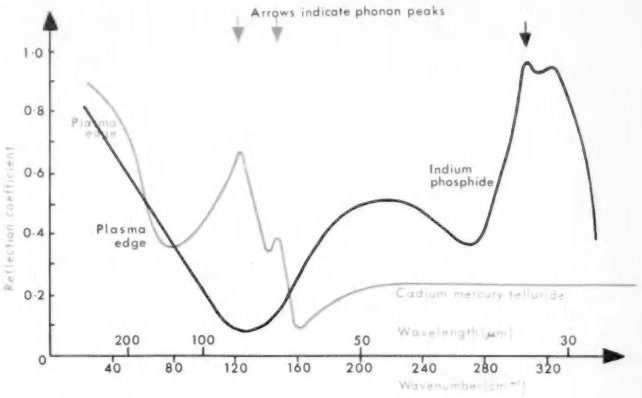


Fig. 2. Reflection spectra of cadmium mercury telluride and indium phosphide.

MTIRA study of machining with clean cutting fluid

In a report to the former Ministry of Technology, the Machine Tool Industry Research Association showed that there is evidence that technical and economic benefits can accrue from removing the fine solids from the cutting fluids during machining operations for which a filter would not normally be employed. To examine this aspect of 'cleanliness' in the context of a wide range of machining conditions is an expensive task, and one probably outside the scope of any single company. Nevertheless the results of such an investigation would be of interest to a very wide cross-section of the engineering industry, and MTIRA is therefore proposing to undertake the project on the basis that the cost be shared by several companies. For further information firms interested in participating in such a group sponsorship should contact: Mr. P. J. C. Gough, The Machine Tool Industry Research Association, Hully Road, Macclesfield, Cheshire SK10 2NE.

news

Conference on the design process

The Conference, to be held at Kensington Close Hotel, London W8, from September 21 to 24, 1971, will 'seek to assist engineering management and designers to examine and discuss design programmes concerning improvements which might be gained from new techniques and current developments in design practice'. The first two days will be concerned with the nature and planning of design, the fostering of innovation and the place of design in the company structure, and the third and fourth with new techniques and developments affecting the design process (including the role of aesthetics, cost-analysis techniques, data systems and methods of determining design objectives). The last afternoon will be devoted to an open forum highlighting aspects on which the attention of management should be focused.
More information: Mr. A. H. L. Key, Capital Goods Office, Council of Industrial Design, 28 Haymarket, London SW1Y 4SU. Tel: 01-839 8000.

NCC seminar on data capture

In the June (No. 47) issue of *New Technology* we incorrectly stated that the National Computing Centre was organising a seminar on data capture at the National Film Theatre, London, in December 1971. In fact this seminar was held some time ago. We apologise to readers and the NCC for any inconvenience caused by this mistake. NCC is, however, planning another seminar on data capture, to take place in Manchester on October 7, 1971, information on which will appear in *New Technology* as soon as it becomes available.

CAD presentations in Manchester

In association with DTI's North West Regional Office, the Computer Aided Design Centre is putting on, at the Piccadilly Plaza Hotel, Manchester, from September 28 to October 1, 1971, a series of lectures and demonstrations showing industry in the North West what computer-aided design techniques and facilities are at its disposal and identifying suitable application problems. On show will be a variety of computer terminal equipment, including teletypes and remote plotters, storage-tube graphic displays and a remote satellite computer with an interactive display console. The treatment of practical design problems will be demonstrated 'on line' to the Centre's system at Cambridge.
More information: Mr. D. D. Bowen, Department of Trade and Industry, North West Regional Office, Sunley Building, Manchester. Tel: 061-832 9111, Ext 371.

Conference on computer techniques in chemical research

The Conference, and an accompanying instrument exhibition, is to be held by the Institute of Petroleum's Hydrocarbon Research Group at the Midland Hotel, Manchester, from 15 to 17 November, 1971. Reviews and research papers will be presented on, *inter alia*, data acquisition, Fourier transform spectroscopy, computer control of experiments, information systems for chemists, interpretation of data, and laboratory control and reporting systems. Those wishing to contribute research papers should submit an abstract of 200-300 words (full manuscripts of up to 5,000 words will be called for by the end of August 1971) to the following, to whom enquiries should also be addressed: Mr. C. H. Maynard, Administrative Secretary, Institute of Petroleum, 61 New Cavendish Street, London W1M 8AR.

Pera courses on quality management

£500 million a year—such is the saving which, it has been estimated, British industry could achieve by the application of modern techniques for more effectively controlling the quality and reliability of manufactured products. Against this background Pera has developed a modular series of courses aimed at satisfying the need for training in designing and manufacturing products for quality-conscious markets. Pera's training programme consists of a package of six three- or five-day courses, covering, respectively: Quality Management—General Appreciation; Practical Quality Management; Quality and Design; Quality and Manufacture; Quality and Purchasing; and Modern Inspection. The first series of courses start in October 1971.
More information: Production Engineering Research Association, Melton Mowbray, Leics. Tel: Melton Mowbray 4133.

'Modern Developments in Flow Measurement'

Subject: International Conference of the above name. *Sponsors*: Atomic Energy Research Establishment, Harwell, and the National Engineering Laboratory, East Kilbride. *Venue*: Oxford and Harwell. *Date*: September 21 to 23, 1971. *Aim and scope*: To bring together scientists responsible for developing flow meters and flow-measuring techniques and those (consultants, process engineers, hydraulic-machine designers, users) with an interest in measuring the flow of liquids and slurries in open channels of regular cross-section and the flow of liquids and gases in pipes. *Emphasis*: On modern developments in such fields as lasers, ultrasonics, NMR, thermodynamic flow meters, and tracer techniques. River-flow measurement is excluded as a topic.
More information: Mr. C. J. A. Preuveneers, Conference Secretary Flow Measurement Conference, Building 455, AERE, Harwell, Didcot, Berks.

Wolfson Opto-Electronics Centre opens at Queen's University

On the basis of a £75,000 Wolfson Foundation grant, the Department of Pure and Applied Physics, Queen's University, Belfast, has set up the Wolfson Opto-Electronics Centre. The Centre, which opened on July 1, will provide the opto-electronic industry, on a commercial basis, with measurement, standardisation and test facilities covering such aspects as assessment of optical materials, testing and standardisation of luminous sources and photodetectors, laser parameter measurement and standardisation, and calibration of photographic recordings.
More information: The Manager, Wolfson Opto-Electronics Centre, Department of Pure and Applied Physics, Queen's University, Belfast BT7 1NN. Tel: Belfast 45133, Ext 487.

Course on group technology practice

On August 24, 1971, Birniehill Institute is holding a one-day course consisting of lectures, discussions and tutorial exercises covering the steps necessary for effective implementation of group-technology practices, with particular reference to manufacture, but also including their application to the design and drawing office and to production planning and control.
More information: The Course Organiser, Birniehill Institute, National Engineering Laboratory, East Kilbride, Glasgow. Tel: 20222, Ext 570.

National Materials Handling Centre holds seminar on computer planning of warehouse and factory layouts . . .

The seminar will take place at the Centre on September 2-3, 1971. The guest speaker—James Apple, Professor of Industrial Engineering, Georgia Institute of Technology, USA—is author of *Plant Layout and Materials Handling*, *Lesson Guide Outline on Materials Handling Education* and the materials-handling sections of various major plant and industrial engineering handbooks.
More information: The Director, National Materials Handling Centre, Cranfield Institute of Technology, Cranfield, Beds. Tel: Cranfield 323.

. . . and reports on package-coding techniques and ergonomic design of fork-lift trucks

Package Coding Techniques (price £3.50) reports research conducted by the author, Rex Ingram, at the former Materials Handling Research Unit, and includes an assessment of commercially available equipment and of the technique's potentially wide range of applications.

Ergonomic Aspects of Fork Lift Truck Design—A Review of Current Practice, by R. W. Astley and R. H. Lawton, costs £5. It reviews the first stages of research into the subject carried out at the Department of Engineering Production, Birmingham University, and consists of a critical survey of the literature and a report of work on the identification of the control functions of fork lift trucks and how they are achieved.
More information: Mr. A. J. Prior, National Materials Handling Centre.

More information: Where possible, items in *New Technology* indicate the best sources of further information. Readers are advised also to seek information on matters relating to *New Technology* from the following DTI regional offices: Edinburgh, 031-225 1822; Cardiff 62131; Newcastle upon Tyne 27575; Manchester, 061-832 9111; Leeds 38232; Nottingham 46121; Birmingham, 021-643 8221; Bristol 21071; South East and East Anglia, 01-799 5688. In Northern Ireland, information is given by the Dept. of Industrial and Forensic Science, Belfast 21722.
Editorial Office: Department of Trade and Industry, Room 439, 1 Victoria Street, London S.W.1. Tel: 01-222 7877, ext. 2620.
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Members of a Canadian trade mission look on as an operator checks a micrometer spindle for parallel at the precision toolmaking firm of Moore & Wright (Sheffield) Ltd., a member of the James Neill Group. The mission is in this country to see British toolmaking production techniques and manufacturing processes. During their stay, they are to tour ten factories in Sheffield, Birmingham and London. The purpose of the visit is to establish closer trade relationships with the object of selling more British-made tools to Canada.

The realistic zebra head held by this little boy is one of John Waddington Ltd.'s latest lines: three-dimensional animal heads. Waddington's international sales manager, David Westinidge, has reported that overseas sales of the company's Games Division are currently 20 per cent up on last year. The biggest customers are in Europe, the Near and Far East and in Canada. The company has recently shipped £3,500 worth of jigsaws to Denmark.

Industrial building in the second quarter

THE FLOOR AREA approved by industrial development certificates for projects of 10,000 sq. ft. and over in the second quarter 1971 was 14.9 million sq. ft., bringing the total for the 12 months to end June 1971 to 75.7 million sq. ft. In the preceding 12 months 93.1 million sq. ft. were approved.

The proportion of the total which was approved in development areas was 32 per cent (24.5 million sq. ft.) in the most recent 12 months compared with 30 per cent in the preceding 12 months (28.3 million sq. ft.).

In the intermediate areas 7.3 million sq. ft. were approved in the 12 months to end June 1971 compared with 7.8 million sq. ft. in the previous 12 months.

TABLE 1. INDUSTRIAL DEVELOPMENT CERTIFICATES APPROVED

(Excluding cases of under 10,000 square feet)

Million square feet

	GREAT BRITAIN														
	Total	Development Areas		Intermediate Areas		Rest	North	Yorkshire and Humberside	East Midlands	East Anglia	South East	South West	West Midlands	North West	Wales	Scotland
			(1)		(2)											
1967	76.5	26.9	35	5.2	7	44.4	7.0	7.5	5.6	3.2	17.8	5.4	5.6	9.6	5.1	9.7
1968	98.0	35.7	36	5.9	6	56.4	11.4	7.6	6.2	4.1	18.1	5.3	9.9	16.0	8.2	11.3
1969	103.0	30.6	30	7.2	7	65.2	9.2	13.8	5.8	5.8	22.8	5.8	8.6	15.1	7.6	8.6
1970	88.9	29.9	34	8.5	10	50.5	7.8	7.4	5.8	2.7	19.5	5.2	7.7	14.4	8.0	10.3
1967 1st quarter	24.2	9.3	38	2.1	9	12.8	2.4	3.1	1.4	0.6	4.6	1.6	1.7	3.1	1.5	4.0
2nd quarter	18.5	6.4	35	1.1	6	11.1	1.3	1.8	0.7	0.7	4.6	1.4	1.5	2.5	1.4	2.7
3rd quarter	18.3	5.5	30	0.9	5	11.8	0.8	1.5	2.0	0.8	5.1	1.3	1.4	2.6	1.1	1.7
4th quarter	15.6	5.8	37	1.1	7	8.8	2.5	1.2	1.4	1.0	3.6	1.1	1.0	1.5	1.1	1.4
1968 1st quarter	21.7	8.4	39	1.4	6	11.9	2.5	1.6	1.5	1.4	3.3	1.3	1.4	3.4	1.6	3.7
2nd quarter	23.9	7.6	32	1.5	6	14.8	3.2	2.6	1.1	0.8	4.6	1.7	3.5	3.0	1.1	2.3
3rd quarter	28.1	12.1	43	1.5	5	14.5	4.2	1.9	1.3	1.1	5.7	1.3	2.4	4.6	2.9	2.7
4th quarter	24.3	7.7	32	1.6	7	15.0	1.4	1.5	2.2	0.8	4.5	1.1	2.6	4.9	2.6	2.6
1969 1st quarter	29.6	8.8	30	1.7	6	19.1	2.4	3.1	1.9	1.8	7.4	2.0	2.2	4.2	2.2	2.4
2nd quarter	26.7	9.3	35	1.6	6	15.7	3.7	1.8	1.5	1.6	6.0	1.5	2.2	4.7	1.9	1.8
3rd quarter	22.8	6.2	27	1.6	7	15.0	1.8	3.2	1.3	1.2	5.0	1.3	2.2	2.9	2.1	2.0
4th quarter	23.9	6.2	26	2.2	9	15.5	1.3	5.8	1.1	1.1	4.5	1.0	2.0	3.4	1.4	2.3
1970 1st quarter	22.7	6.6	29	2.5	11	13.6	1.7	1.7	1.3	0.6	5.1	1.1	2.5	5.1	1.9	1.6
2nd quarter	23.7	9.3	39	1.5	6	12.9	3.5	1.6	2.0	0.8	4.9	1.4	1.6	2.9	2.7	2.2
3rd quarter	22.0	7.2	33	2.6	12	12.2	1.5	1.6	1.2	0.7	5.2	1.4	2.2	3.3	1.5	3.4
4th quarter	20.6	6.9	33	2.0	10	11.7	1.1	2.5	1.2	0.5	4.3	1.3	1.5	3.1	2.0	3.1
1971 1st quarter	18.2	4.6	25	1.7	9	11.9	1.7	1.9	1.0	0.7	4.7	0.9	2.2	2.1	0.7	2.3
2nd quarter	14.9	5.8	39	1.0	7	8.1	1.5	1.1	1.0	0.4	3.7	1.1	1.0	1.9	1.4	1.8

Notes: The figures relate to schemes, 10,000 square feet and over, for both manufacturing and non-manufacturing industry approved during the periods stated: New Buildings, extensions to existing premises and existing buildings turned to industrial use are included.

(1) The figures in this column are Development Area approvals as percentage of Great Britain totals. The places designated as Development Areas under the Industrial Development Act 1966 are the whole of the North Region, most of Scotland and Wales, and parts of the North West and South West Regions.

(2) The figures in this column are Intermediate Area approvals as percentage of Great Britain totals. The places designated as Intermediate Areas under the Local Employment Act 1970 cover broadly, the Yorkshire Coalfield, North Humberside, North-East Lancashire, parts of the Nott's Derby Coalfield, parts of South-East Wales, Plymouth and Leith announced in June 1969 and the Bridlington, Filey, Oswestry, Okehampton, Tavistock, Edinburgh and Portobello employment exchange areas announced on February 18, 1971.

Percentages are calculated from figures expressed in thousands of square feet. All floor area figures are derived from records in which each case is rounded to the nearest thousand square feet.

(P) The figures for the second quarter 1971 are provisional.

(continued on next page)

INDUSTRIAL BUILDING
Continued

TABLE 2. INDUSTRIAL DEVELOPMENT CERTIFICATES APPROVED

(Cases of under 10,000 square feet) (Million square feet)

	Under 5,000 square feet (0-4)			5,000 and under 10,000 square feet (5-9)		
	South-East, East Anglia East and West Midlands	Rest of Great Britain	Total Great Britain	South-East, East Anglia, East and West Midlands	Rest of Great Britain	Total Great Britain
1967	2.7	0.6	3.3	6.5	4.5	11.0
1968	3.3	0.6	3.9	7.8	5.3	13.1
1969	3.6	0.7	4.3	8.2	5.5	13.7
1970	3.3	0.5	3.8	7.6	4.8	12.5
1967 1st quarter	0.8	0.1	0.9	1.9	1.2	3.2
2nd quarter	0.8	0.2	0.9	1.7	1.1	2.7
3rd quarter	0.6	0.2	0.7	1.4	1.0	2.4
4th quarter	0.6	0.2	0.8	1.5	1.1	2.7
1968 1st quarter	0.8	0.2	1.0	1.7	1.2	3.0
2nd quarter	0.6	0.1	0.8	2.0	1.4	3.4
3rd quarter	0.9	0.2	1.1	2.1	1.3	3.3
4th quarter	0.9	0.1	1.0	2.0	1.3	3.4
1969 1st quarter	1.0	0.2	1.2	2.1	1.7	3.8
2nd quarter	1.0	0.2	1.2	2.2	1.3	3.5
3rd quarter	0.8	0.2	0.9	2.0	1.2	3.3
4th quarter	0.8	0.1	0.9	1.8	1.3	3.1
1970 1st quarter	0.9	0.2	1.1	2.1	1.3	3.4
2nd quarter	0.9	0.1	1.0	2.1	1.4	3.5
3rd quarter	0.8	0.1	0.9	1.7	1.1	2.8
4th quarter	0.7	0.1	0.8	1.8	1.0	2.8
1971 1st quarter	0.2	0.0	0.2	1.2	0.1	1.3
2nd quarter p	0.1	0.0	0.2	1.1	0.1	1.2

Notes: The exemption limits, above which certificates are needed, were raised on December 15, 1970, from 3,000 to 5,000 square feet in the South-East (except Isle of Wight), East Anglia, East and West Midland regions and from 5,000 to 10,000 square feet elsewhere. For developments up to the limits only certain types of cases need certificates.
(p) The figures for the second quarter 1971 are provisional.

General index of retail prices for June

THE DEPARTMENT of Employment announce that at June 22 the official index figure which measures changes in the average level of retail prices compared with the level at January 16, 1962 (taken as 100) was 154.3 compared with 153.2 at May 18.

The rise in the index during the month was due to higher prices for potatoes, some other fresh vegetables and many other goods and services.

There was a fall in the average price of tomatoes. Prices of fresh vegetables vary seasonally.

Business monitor

THE FOLLOWING TITLES and issues of Business Monitor are now available and copies may be obtained by annual subscription from HMSO, PO Box 569, London SE1.

Production series

Monthly at £1 a year post free:

Salt for May
Rubber for April
Foam Backing, Foam Laminating and Fabric to Fabric Bonding for May
Tools and Implements for March
Trailers for March
Cars and Commercial Vehicles for May
Tape Recorders for February
Gramophone Records for April

Quarterly at 37½p. a year post free:

Bedding and Soft Furnishing for Fourth Quarter 1970
Toilet Preparations for First Quarter 1971
Musical Instruments for Fourth Quarter 1971
Sports Equipment for Fourth Quarter 1971
Elastic Goods and Narrow Fabrics for First Quarter 1971
Watches and Clocks etc., for First Quarter 1971
Wall coverings for First Quarter 1971
Shop and Office Fitting for Fourth Quarter 1970
Metal Furniture for Fourth Quarter 1970

A complete list of titles of Business Monitors was last published in *Trade and Industry* on July 22 on page 142.

Production in the cotton industry

THE VOLUME OF PRODUCTION in the cotton industry (including the processing of man-made continuous filament yarn and finishing) in May 1971 was 5 per cent more than in May 1970.

Statistics issued by the Textile Council show that in the five months January to May the amount of cloth woven was 8 per cent less than in the corresponding period of last year. Production of single yarn was 3 per cent less and the amount of yarn doubled 13 per cent less.

PRODUCTION IN THE COTTON INDUSTRY

Annual totals and weekly averages

	Single yarn(†)		Doubled yarn		Processed filament yarn	Woven cloth	
	Cotton yarn (‡)	Spun man-made yarns and mixture yarn, inc. waste	Cotton yarn	Other	Textured yarn (§)	Cotton	Man-made fibre and mixtures
	Million lb.					Million lin. yards	
1963	488.7	127.0	131.4	107.0	..	1,014.1	560.3
1964	508.1	145.9	136.1	120.0	40.7	1,033.1	610.1
1965	484.8	142.5	131.5	120.3	47.5	1,015.0	624.4
1966	455.7	136.2	123.1	110.2	62.2	915.3	616.6
1967	383.8	124.8	108.1	105.2	78.4	745.0	529.8
1968	377.4	148.7	110.0	114.6	113.6	730.7	554.8
1969	366.4	161.3	103.2	134.3	150.5	723.4	588.5
1970	349.8	170.7	95.2	126.3	181.7	686.4	529.6
1970 April	7.5	3.6	2.1	2.7	3.6	15.0	11.1
May	7.2	3.4	2.0	2.7	3.3	14.0	10.7
June*	5.6	2.9	1.6	2.0	3.1	13.9	10.0
July	6.0	2.8	1.6	2.2	2.9	7.9	7.2
August	7.1	3.5	1.8	2.6	3.2	13.5	10.0
September*	6.2	2.9	1.6	2.3	3.5	11.8	9.2
October	7.5	3.6	2.0	2.7	4.2	14.3	11.1
November	7.5	3.8	2.0	2.6	4.6	14.1	11.1
December*	5.7	3.1	1.5	1.9	3.7	11.5	8.8
1971 January	7.1	3.9	1.9	2.4	4.4	13.5	11.1
February	6.7	4.0	1.9	2.4	4.5	13.3	11.1
March*	6.5	3.9	1.7	2.3	4.3	13.0	10.7
April	5.2	3.4	1.6	1.9	4.0	11.1	9.3
May	6.4	4.0	1.8	2.4	4.2	12.7	11.1

(†) Spun in the cotton industry. (‡) Including yarns wholly of cotton waste and mixture yarn of cotton and cotton waste. (§) Deliveries.

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Northern Ireland index of production

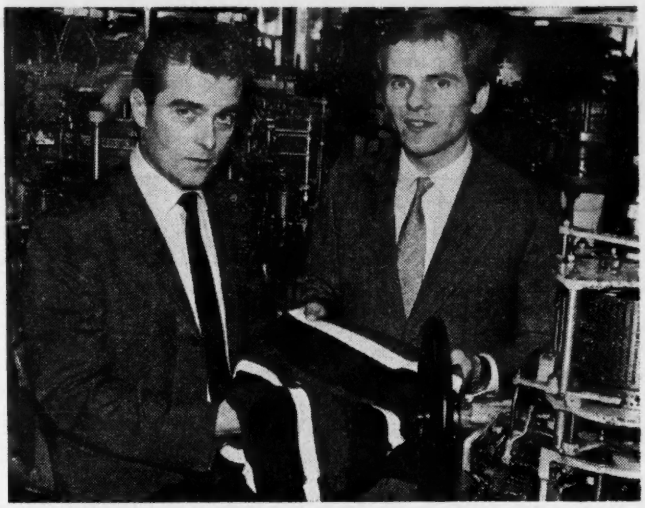
THE PROVISIONAL index of industrial production for Northern Ireland for May 1971 is 159 (1963 = 100). This is 1 point lower than the index for April 1971 and 4 points higher than for May 1970.

The index numbers for the main industrial groups with the increase or decrease on May 1970 shown in brackets are: Textiles 232 (+30 points); clothing 134 (+5); engineering and metals 121 (−9); food, drink and tobacco 133 (+6); timber and furniture 139 (−3); mineral products 163 (−6); other manufacturing industries 236 (−3); gas, electricity and water 163 (+11).

Output of the wool textile industry

THE VOLUME OF PRODUCTION in the wool textile industry in May 1971 was 2 per cent more than in May 1970.

Statistics issued by the Wool Industry Bureau of Statistics show that in the five months January-May deliveries of woven fabrics (excluding blankets) were 12 per cent less than in the corresponding period of 1970 and deliveries of worsted yarn (excluding semi-worsted yarn) were 7 per cent less. Production of wool and hair tops was 20 per cent less and man-made fibre tops 24 per cent less.



Orders from America and Canada totalling £100,000 have been placed in the last few weeks with the Leicester-based knitwear firm of Waling & Ball Ltd. All the orders are for the cut and sewn type of garments in which the company specialises—trendy, teenage casual styles. The company, part of the B. R. Mellors group has recently changed its policy to meet the demands of the booming teenage market. 95 per cent of output is now sold to outside customers with the emphasis on exports, particularly to North America. Picture shows Mr. Bob Ball (left) and Mr. Tom Waling, directors of the company.

OUTPUT OF THE WOOL TEXTILE INDUSTRY

	Consumption	Production			Deliveries			
	Raw Wool (Clean weight)	Tops		Woollen Yarn (†)	Worsted Yarn (§)	Woven Fabrics (excluding blankets) (‡)		Blankets (†)
		Wool and Hair	Man-made Fibres			Woollen	Worsted	
	Million kilos					Million sq. yds.		
1963	207.7	137.9	19.1	142.0	108.7	176.8	148.6	35.1
1964	189.7	120.3	25.8	147.8	105.8	177.1	148.3	32.9
1965	182.6	112.3	25.9	146.0	103.2	175.3	147.6	32.8
1966	176.1	104.2	28.5	142.7	100.2	168.4	133.9	30.5
1967	163.3	92.1	27.6	138.1	89.6	163.2	131.3	28.7
1968	177.5	96.6	36.4	147.4	98.2	162.4	132.3	32.7
1969	174.5	92.0	42.2	142.2	100.5	155.6	130.6	32.2
1970	153.1	79.7	44.6	129.4	97.6	138.1	119.3	29.4
1970 1st quarter	41.8	22.5	11.2	33.7	24.5	33.3	31.0	7.5
2nd quarter	41.7	22.2	11.5	33.5	26.1	36.8	31.1	6.3
3rd quarter	32.8	17.5	10.5	27.9	21.9	33.8	26.5	6.9
4th quarter	36.8	17.6	11.3	34.3	25.0	34.3	30.8	8.6
1971 1st quarter	37.4	17.7	8.4	35.4	23.6	30.0	27.4	9.1
1970 April	14.8	8.2	4.0	11.7	9.6	12.0	10.7	2.3
May	12.5	6.2	3.5	10.2	7.5	11.8	9.4	1.9
June	14.4	7.8	4.0	11.6	9.0	13.0	11.0	2.2
July	12.2	7.2	4.1	9.0	8.1	11.4	9.0	1.7
August	9.0	4.2	2.6	8.3	5.8	10.5	7.2	2.2
September	11.6	6.0	3.8	10.6	8.0	11.9	10.3	3.0
October	12.1	5.7	4.3	11.7	8.9	12.4	10.8	3.4
November	12.9	6.2	4.1	11.7	8.4	11.8	10.6	2.6
December	11.8	5.6	3.0	11.0	7.7	10.1	9.5	2.6
1971 January	12.0	5.6	2.8	11.2	7.4	10.2	9.2	3.2
February	11.7	5.6	2.7	11.2	7.6	9.5	8.5	2.9
March	13.7	6.5	2.9	13.1	8.6	10.2	9.7	3.0
April	12.2	5.7	2.7	11.5	7.7	9.9	8.1	2.9
May	13.1	6.1	3.2	11.9	7.9	11.9	8.3	2.1

(†) Estimated. (‡) Woven woollen fabrics include fabrics which are mainly woollen by weight of components and, similarly, woven worsted fabrics include fabrics which are mainly worsted by weight of components. (§) From January 1969 includes semi-worsted yarn; previously yarn of this type was not separately distinguished and the small quantities involved were divided between the woollen and worsted yarn headings. In May deliveries of semi-worsted yarn were 0.7 million kilos.

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Registrations of British and foreign films

The following are details of films registered by the Department of Trade and Industry under the Films Acts 1960 to 1970 during the week ended Friday, July 23, 1971. Br/E indicates that the film is a British quota film.

Title of film	Registered No.	Playing time minutes	Date of registration	Registered in the name of	Maker's name
			BRITISH		
Life at the Limit	Br/E 35623/24/7/76	17	July 20	Twentieth Century-Fox Film Co. Ltd.	Cecil-Wright Topping (Films) Ltd.
Edith Piaf	Br/E 35628/24/7/76	22	July 20	Vaughan Films Ltd.	Triangle Film Productions Ltd.
Movietone News 2198	Br/E 35565/24/7/76	7	July 23	Twentieth Century-Fox Film Co. Ltd.	British Movietonews Ltd.
Movietone News 2198A	Br/E 35566/24/7/76	7	July 23	Twentieth Century-Fox Film Co. Ltd.	British Movietonews Ltd.
			FOREIGN		
Blue Water, White Death	F 35624	99	July 20	Twentieth Century-Fox Film Co. Ltd.	Cinema Center Films
Le Mans	F 35625	108	July 20	Twentieth Century-Fox Film Co. Ltd.	Solar Productions Inc. and Cinema Center Films
Diary of a Mad Housewife	F 35626	95	July 20	Rank Film Distributors Ltd.	Universal International Film Inc.
Bed and Board	F 35627	97	July 20	Columbia Pictures Corporation Ltd.	Les Films du Carosse, Paris, Valoria Films, Rome and Fida Cinematografica Rome
Technology Phooey	F 35629	6	July 22	United Artists Corporation Ltd.	Mirisch, D. F.
Cold Turkey	F 35630	101	July 22	United Artists Corporation Ltd.	Tandem DFI Corporation

Note: In the list of films registered during the week ended Friday, July 9, 1971, the playing time of the film 'A Day With The Boys' (F 35613) should read 18 minutes.

Correction to the Register:
The name of the maker of the film 'One of Those Things' (F 35543) has been corrected to 'Nordisk Films Kompagni'.

Amendment to the Register:
The title of the film 'Love and Marriage' (Br/E 35510/5/6/76) registered on June 2, 1971, has been amended to 'Sex, Love and Marriage'.

'Economic Progress Report' for August

THE FOLLOWING articles are carried in the August issue of *Economic Progress Report*, published on July 21.

Economic implications of EEC membership: extracts from the White Paper 'The United Kingdom and the European Communities'; Monthly economic assessment: also published in *Trade and Industry*, July 22, page 135; and economic indicators: a full page of charts illustrating some main indicators of the course of the economy 1969-71.

Copies of *Economic Progress Report* are available from Circulation Section (H), Central Office of Information, Hercules Road, London SE1.

Dear editor . . .

Letters to the Editor should be addressed to the Editor, *Trade and Industry*, Room 437, Department of Trade and Industry, 1 Victoria Street, London SW1H 0ET, and *not* to HMSO.

BOOSEY & HAWKES LIMITED

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1971
THE QUEEN'S AWARD TO INDUSTRY

Extract from Report and Accounts 1970

	1970	1969
	£	£
GROUP NET PROFIT AFTER TAXATION	484,557	358,003
DIVIDENDS—Preference	20,109	21,438
Ordinary	170,043	147,153
RETAINED	294,405	189,412

The considerable advance in trading profits on the previous year continues the trend of increased trading profits every year since 1961.

The final ordinary dividend has been increased to 18 per cent making a total of 26 per cent (1969 22½ per cent).

Despite difficulties created by rising costs, the music sales division has shown satisfactory results. In music publishing, royalty revenue continues to make a substantial contribution.

The musical instrument division achieved new records. In recognition of our efforts in the export field, the Company has been honoured with the Queen's Award to Industry for 1971.

There was an increase in the sale of Hammond organs during 1970 and the results are considered satisfactory.

Subject to unforeseen circumstances it is expected that profits and dividends will be maintained in 1971.

Thanks are expressed to employees throughout the group.

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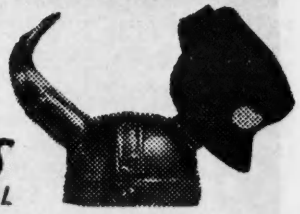

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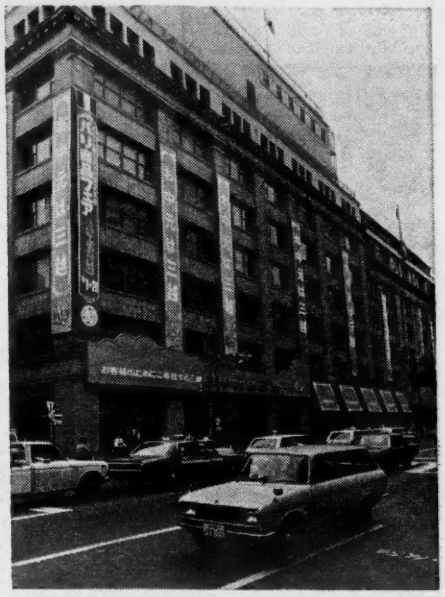
Big business in Japanese store promotions



Mitsukoshi's main store in the Ginza, central shopping area of Tokyo.

BRITISH PROMOTIONS in the Japanese department stores are big business. British Week in 1969 showed what could be done. Last year there were British promotions in 29 stores: this year it is hoped to put on 44 throughout Japan. The aim is to add another £10 million sales to the £30 million of British goods which it is estimated the department stores are selling at present.

The promotions at the 12 stores of the Mitsukoshi group are one of the highlights. The main store at Nihonbashi in the heart of Tokyo is organising a supporting cultural exhibition based on Henry VIII and the Tudor period, together with an exhibition of Renaissance and Baroque paintings, and sketches by famous masters, all in British possession. In addition, there will be an exhibition showing various aspects of Anglo-Japanese relations in the 16th and 17th centuries. The total value of the exhibits may well be in excess of £22 million. Mitsukoshi will also be holding an exhibition on sport in Britain at their Ginza store, with the main theme 'Leisure in Scotland'.

These fairs provide direct and measurable encouragement for sales of British consumer products. The Mitsukoshi group are spending about £500,000 in additional purchases over and above the level for 1970. Total sales in 1971 may reach close on £2 million. Mitsukoshi are clearly satisfied that British goods sell well, and with good reason. At Expo in Osaka last year, the Mitsukoshi shop in the International Bazaar sold about £1,100,000 worth of British consumer products, mostly food and drink. The store was by far the most successful of all the individual shops at Expo.

A further ambitious series of promotions is being held by the Isetan 11 Store Group, the central buying group for a series of department stores throughout the country. Last year they held highly successful British promotions at 26 stores, and this year the same number will be taking part. Additional purchases for the promotion will total about £560,000, and total sales of British consumer goods throughout the group in 1971 should reach around £2 million. As supporting events, it is hoped that a British regimental pipe and drum band will give performances throughout Japan.

A leading Osaka firm, Daimaru, are holding British promotions at their four stores in Osaka, Kobe, Kyoto and Tokyo at different periods during the latter half of October. An exhibition of historical and modern Wedgwood pottery is being organised for the Osaka and Tokyo stores, and a Wedgwood potter will demonstrate his skills. There will also be an exhibition of British toys and dolls for the Kobe store, and of coins and medals for the Kyoto branch. Daimaru have placed orders for British goods worth £260,000 more than they spent last year.

Finally, Hankyu, another leading Osaka store, hope to have British promotions at their Osaka and Tokyo branches this October, and are at present making final plans. New buying for these two fairs will approach £200,000.

The Department of Trade and Industry is contributing to all these promotions by supplying display material and financial assistance, and by helping with supporting attractions. Similar support in the past has paid good dividends. Following the success of British Week, Japan has been an ever-growing market for British consumer goods. There are now very few barriers left to imports, and most rates of duty are reasonable. Last year, the total value of British consumer exports reached around £55 million, approaching 40 per cent of total British exports to Japan. All the signs are that this successful trend is continuing. For example, imports of Scotch whisky, which were liberalised in January, reached nearly £2 million in the first five months of this year, an increase of 68 per cent over the equivalent period last year. Imports of British woollen cloth and worsteds have also been doing remarkably well. Last year they reached over £12 million, an increase of about 40 per cent compared with 1969. Also, an ever-growing number of British firms have been concluding licensing agreements in Japan in the clothing field, and there are many opportunities there for those ready to grasp them.

Good prospects in the food and drink sector are not confined to whisky. Imports of British chocolates, sweets and biscuits have increased markedly over the past few years, and British firms should do even better when quota restrictions are lifted, as planned, in September this year. British toys have been another success story. In some instances, for example, die-cast models have even undercut their Japanese competitors in their home market. Imports of British panel heaters and oil stoves have also been expanding rapidly.

The store promotions being held this year should help to maintain the momentum and ensure that we maintain, or indeed improve, our share of the valuable department store

Daimaru store in Osaka.

Bespoke tailoring in British materials on show at the Isetan British Fair last autumn.

trade. Japanese departments stores play a far bigger role in retail trade than in other countries. For example, total sales in the Mitsukoshi group last year were in excess of £200 million, and other groups, including Daimaru, were not far behind. The three stores of Isetan, as distinct from the larger Buying Group of over 30 stores, alone sold nearly £100 million worth of goods last year. Supermarkets have overtaken department stores in total sales, but as yet do not carry anything like the same quantity of imported goods as the latter, which handle about 75 per cent of all foreign consumer products sold through retail outlets. However, as the Japanese standard of living increases, opportunities with the supermarkets should also grow.

Exporters of British consumer goods, who are not yet doing business in Japan may well be missing a golden opportunity. As the Japanese economy expands and as the tastes of consumers here become increasingly westernised and sophisticated, the demand for imported consumer goods may approach that of the United States. Already Japan is Britain's best market for woollen cloth. British consumer products in many fields are very highly regarded; the aim is to widen the range of our products on sale in Japan.

The Department of Trade and Industry would be pleased to help any firms seeking to enter this exciting and profitable market, in addition, of course, to helping those already established here.

£2¼ million worth of business transacted at ENPOCON and Effluent & Water Treatment Exhibitions

THE FIRST appearance of the Environmental Pollution Control Exhibition (ENPOCON) with the seventh appearance of the Effluent & Water Treatment Exhibition closed recently after four days of 'resounding success'. Virtually all exhibitors expressed satisfaction at the results obtained and some were enthusiastic to the point of asking for an immediate booking for the next appearance, stated organisers. Total attendance at the exhibitions was 13,323.

The final total of business reported to the organisers was £2,246,250. This figure represents results of 'firm orders and inquiries' from a total of 94 companies out of 213—rather less than half of those represented.

Although originally conceived as two separate events, it became evident that the relationship between many aspects of exhibitors' work made it desirable that the exhibitions should, in the event, be so closely associated, that they became effectively one event.

Between them they occupied just over 50,000 square feet of display space—set in approximately 100,000 square feet of space in the Grand Hall at Olympia, London. The final tally of stands was 125—with 213 companies represented (ie known subsidiaries, associates, agencies or sister companies).

The largest group of participants from overseas came from Sweden—the Swedish National Stand being organised by the Swedish Chamber of Commerce For The United Kingdom. Thirteen Swedish companies participated in this display.

Ten special missions visited the exhibitions from overseas. These included a Japanese Pollution Mission—the Japanese Environmental Pollution Control Equipment Survey Team, consisting of 20 members; a Product Prospecting Mission of 12 members from Ontario, Canada, led by Mr. Arthur Petch, of Industrial Development, Government of Ontario, Canada; an Australian Trade Mission which included Mr. J. Beale, Minister of the Environment for New South Wales; an investigative mission of water engineers from the Republic of South Africa, a special mission from Mexico, and commercial missions from Turkey, Greece, Finland, Sweden and the Federal German Republic.

The total of foreign countries represented was 68—including nearly every European country, Japan, the United States, the USSR, India, Canada, Mexico, Brazil, Argentina, Peru, Indonesia, South Africa, Nigeria, Ghana, Kenya, Zambia, Lebanon, Egypt, Algeria, Burma, Iran, Kuwait, Morocco, Tunisia, Cyprus and Israel.

The exhibitions were accompanied by six conferences—which discussed a wide range of general pollution, waste, effluent and water-treatment problems.

Harrogate fire event

SOME 70 companies engaged in the production of appliances, equipment, materials, instruments, services and chemicals associated with the detection, prevention and fighting of fire, will be exhibiting at the 1971 Fire Fighting & Prevention Exhibition. The exhibition is claimed to be the largest annual event devoted to its subject in the United Kingdom and will be held this year from September 21-23, at the Exhibition Centre, Harrogate, Yorks.

Plans well advanced for aviation show

PLANS FOR the *Flight International* sponsored Business and Light Aviation Show, to be held at Cranfield from September 1-5, are now well advanced.

Once again the show, like that at Cranfield in 1969, is being presented in partnership with the leading British professional bodies in the field—the British Light Aviation Centre, Business Aircraft Users' Association, General Aviation Safety Committee, Guild of Air Pilots and Air Navigators and Society of Licensed Aircraft Engineers and Technologists.

The show is organised by ITF-Iliffe Exhibitions Ltd.

Programme of Trade Promotions 1971-3: corrections

THE programme published as a supplement to *Trade and Industry* on July 22, 1971 contained some errors in Section IV. The following alterations should, therefore, be made to that Section:

Clothing

1971

Delete

LONDON:
London International Fashion Fair.—24-28 October 1971. At Olympia.
This exhibition has been cancelled.

Agriculture, Forestry, Fishing, Agricultural Machinery

1971

Add

LONDON:
Royal Smithfield Show and Agricultural Machinery Exhibition—6-10 December 1971. At Earls Court.
* Apply Smithfield Show Joint Committee, 21/4 Grosvenor Place, London, S.W.1 (Tel. 01-235 7000).

LONDON:
International Poultry Show—14-16 December 1971. At Olympia.
* Apply ITF/Iliffe Exhibitions Ltd., Commonwealth House, New Oxford Street, London, WC1A 1PB (Tel. 01-242 9011).

Packaging Machinery and Materials including Containers

1971

Entry under INTERPHEX '71 should read:

LONDON:
International Exhibition for the Processing, Packaging and Handling of Pharmaceutical Comestic Toiletry and Perfumery Products, INTERPHEX '71—9-12 November 1971. At R.H.S. Old and New Halls, S.W.1.
† Apply A. D. J. Brooks, Esq., B.P.S. Exhibitions Ltd., 220/222 Great Portland Street, London, W1N 5HH (Tel. 01-388 2117).

Toys and Games

1972

LONDON:
Twenty-eighth Amusement Trades Exhibition.
Dates should read: **25-27 January 1972.**

Other Specialised Fairs

1972

MANCHESTER:
International Exhibition of Spring Making Equipment and Materials Exhibition.
Dates should read: **11-14 April 1972.**

Princess Margaret on the HMSO stand at Earls Court during her visit to IPEX 71. A total of 823 exhibitors took part, including 357 from 26 overseas countries.

'Biggest ever' print show in Britain attracts many overseas exhibitors

IPEX 71, the twelfth International Printing Machinery and Allied Trades Exhibition staged at Earls Court and Olympia, London, from July 13 to 24, was said to have been the 'biggest event of its kind' ever held in Britain.

The show, in London again after an interval of eight years, attracted 823 exhibitors including 357 from 26 overseas countries.

There was much to see; developments over the past eight years in the printing and allied industries, in the field of reproduction, typesetting, electronics, platemaking and printing and paper formulation have been at an unprecedented rate.

This major international exhibition was intended to show not only what is available from the graphic arts manufacturing industries of the world, but also to demonstrate how the new processes, methods and techniques are finding application in the industry of today.

Equipment on display ranged from giant rotary book, magazine and newspaper presses, packaging presses printing on paper, foil or plastics, to small table-top printing machines for offset litho, letterpress and screen processes.

Exhibits also covered extra-large darkroom reproduction cameras, electronic colour scanners, digital cathode-ray-tube phototypesetting equipment and high speed film setting machines as well as small enlargers, copying equipment, proofing units, and display lettering devices.

● An exhibition showing how printed matter is designed is on show at The Design Centre, Haymarket, London, until August 21.

Called 'Printers and design', the exhibition shows about 20 separate displays each portraying a 'case history' of a different piece of printed matter, for example, a poster, a catalogue, a label, a calendar, and so on.

'Printers and design' is sponsored by the British Federation of Master Printers, the Council of Industrial Design, Industrial and Trade Fairs Ltd., and the British Printing Machinery Association.

● The HMSO stand at IPEX illustrated HMSO's graphic design studio and involvement in the field of computer-assisted photocomposition. Specimens of various phototypeset work could be seen together with models and slides showing operations at the new Stationery Office press at Gateshead. In conjunction with IPEX, the Controller at HMSO held a conference of Government printers. Delegates from Eire, Finland, France, Germany, Israel, Japan, Netherlands and USA attended. The Agenda included a visit to the press at Gateshead where the latest photocomposing techniques are used.

Gifts International on show in London

THE THIRD International Gifts Fair, London, opens at Earls Court on August 8. Exhibitors will be displaying products ranging over the whole field of giftware, including costume and precious jewellery; silver and metalware; leathergoods and smokers' requisites; glass, china and pottery; tableware and horological goods; toys and fine art; gift cards and wrappings; decorative items for the home, and a host of new ideas in gifts. The Fair continues until August 12.

Heating display at The Design Centre

FOLLOWING the success of The Design Centre's two 'Home Heating' exhibitions held in 1969 and 1970—each of which was seen by a daily average of approximately 4,200 people—a display of heating appliances will this year be held for six weeks at The Design Centre from August 23-October 2.

The exhibition provides a comprehensive guide to some of the best British home heating equipment and will again have the additional service for visitors of on-the-spot advice about central heating.

Opportunities for machine tool exports to Russia

AN INCREASE in machine tool exports to Russia was forecast by Mr. Nicholas Ridley, Parliamentary Under-Secretary of State for Industry, when he opened the British Machine Tool Industry Exhibition in Moscow on July 22.

'Here we have an exhibition which is designed to show the USSR what the British machine tool industry can offer,' he said. 'I think it is an impressive presentation of British expertise which I hope will lead to substantial orders from the USSR in the long term. Exports of British machine tools to the USSR during recent years have been an important element of the total British export performance. In the early part of the 1960s, exports of British machine tools to the USSR amounted to about £2 million annually. By the late 1960s the position had changed dramatically as the result of the orders placed in connection with the Tolyatti and Moskvich motor vehicle projects. During 1969 and 1970, exports averaged £10 million which put the USSR firmly in first place in Britain's most important single machine tool market.

'Now that these large bulk orders are being progressively completed, exports are running at a slightly lower level. However, we are all aware that the USSR 1971/75 Economic Plan provides for major expansions in the USSR motor vehicle industry, as well as other industries which will require the latest and best machine tools. Some substantial orders have already been placed for future delivery and British manufacturers look forward confidently to a future of increasing trade with the USSR.'

Over 200 exhibitors for DIY show

HANDYMEN—and handywomen too—will undoubtedly be at Olympia from August 27-September 11 for the 19th International Handicrafts & Do It Yourself Exhibition which promises to be bigger and better than ever before.

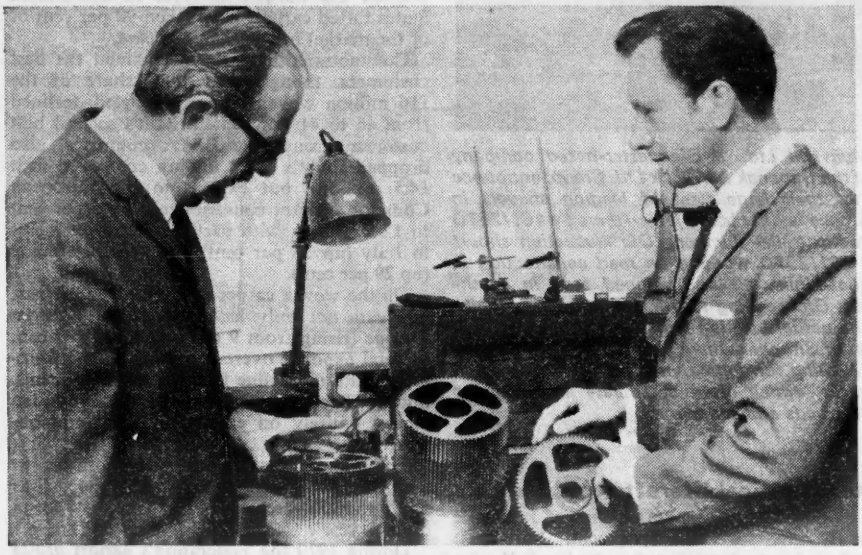
Covering three floors of the Empire Hall, over 200 exhibitors will demonstrate all the new materials and techniques which have made do-it-yourself a pleasurable and profitable way to use leisure-time.

Every aspect of home decorating is covered. Largest single exhibit covering an area of 2,000 sq. ft., is Crown's 'House Full of Beautiful Rooms'. This is a two-storey modern Georgian house, with five main rooms, a drawing room, dining room and three bedrooms. It has two bathrooms and a kitchen.

For those engaged in modernising their homes, British Gypsum are showing how to put up plasterboard ceilings and partitions.

Think of anything to do with d-i-y; double glazing, central heating, decorating, woodwork, furniture making, kitchen and bedroom units, weatherproofing, power tools, universal woodworking machines, winemaking, beer brewing, ladders, loft ladders, painting aids, and you will find it at this annual show. The exhibition will be open daily (except Sundays) from August 27 until September 11, (10 a.m. to 9 p.m. Admission 25p.)

EXPORT ORDERS



Special tooling designed and manufactured by Martin Brothers (Toolmakers) Ltd., London, has enabled an American company to win the Grand Prize in the Powder Metallurgy Part of the Year contest, sponsored by the Metal Powder Industries Federation of America. The winning part, a sintered iron gear of 7 in. diameter and weighing 8 lb. is produced by Burgess-Norton for the Cessna Aircraft Company. The tooling needed to produce this part is believed to be the largest of its kind ever made for sintered components. It consists of two press adaptors, the largest weighing 11 tons and over 11 ft. in height, together with the necessary punches and dies. The part is produced on a 1,000-ton press designed specially to accept the tool rig.

In this picture Mr. A. M. Martin, Martin Brothers chairman, holds the prize-winning sintered gear, while Mr. B. H. Swan, a director of the company, examines both punches used in the tooling.

Orders from Russia and Nigeria

Two recent orders for medium-voltage switchgear have been announced by George Ellison Ltd. The orders, for Russia and Nigeria, have a combined value of some £170,000.

Nine Ellison packaged substations, incorporating air-break switchgear and dry-type transformers, will be in operation in Russia in late 1972, controlling the electrical supply to a new polymer-film plant being built by Sim-Chem Ltd.

The equipment for Nigeria, now being completed at the company's Birmingham works, consists of six oil-break switchboards to control equipment in a Kano State scheme to provide additional water resources for the country.

Swiss order for display systems

The Information Equipment Group of Ferranti Ltd., Edinburgh, announce an order for eight Digi-TV systems, worth £250,000, from Autophon AG of Switzerland. As part of a large information system called 'INVESTDATA' commissioned by Telekurs AG, Switzerland, who are providing a centralised service to the Swiss Banks, the Digi-TV low-cost multi-channel systems will display up-to-date information regarding share price activity in the major financial centres in Switzerland.

Cycle boom in United States

Exports of bicycles to the United States were an all-time record during May for Raleigh Industries, Nottingham. The figure for the month topped the £2.5 million mark and it is expected that, by the end of the year, Raleigh sales in the United States will be 35 per cent up on 1970.

Raleigh's top-selling bicycles in the United States, their largest single market, are the 10-speed lightweight sports models, overall sales of which have already risen dramatically in the first three months of 1971, and the sensationally popular 'Chopper'.

Breakthrough into US market

Kode Ltd., of Calne, Wilts., manufacturers of data processing and peripheral equipment for computers, have broken into the American market. In the face of tough international competition they have won an order worth £60,000 to provide key punches and key punch verifiers to Keyboard Training Incorporated, of New York. The American company has also ordered a £22,000 computer system from Kode.

African purchase of transformers

An order worth about £66,000 has been won by Lindley Thompson Ltd., of Slough, from the Tanzania Electric Supply Co. Ltd., for the supply of distribution transformers ranging from 150 kVA to 500 kVA with voltages of 11-33 kV.

The order has been obtained in the face of keen international competition and the transformers will be shipped to Dar-es-Salaam for use in the country's electrical distribution system. Deliveries begin in November and will be completed by the end of March 1972.

Lindley Thompson Ltd. is a member of the Yorkshire Switchgear Group.

Century for Kuala Lumpur

A National Cash Register Co. Ltd. Century 10 computer system, assembled and final tested at NCR's Dundee factories, is now on its way by sea to Nestle Products (M) Ltd., Kuala Lumpur, Malaysia.

As a multi-national, $1,200 million a year group, Nestle has been active in manufacturing in the Far East for about 20 years, and its Malaysian operations employ just over 500 staff. At Kuala Lumpur, the NCR Century computer will be used for a range of accounting duties at first.

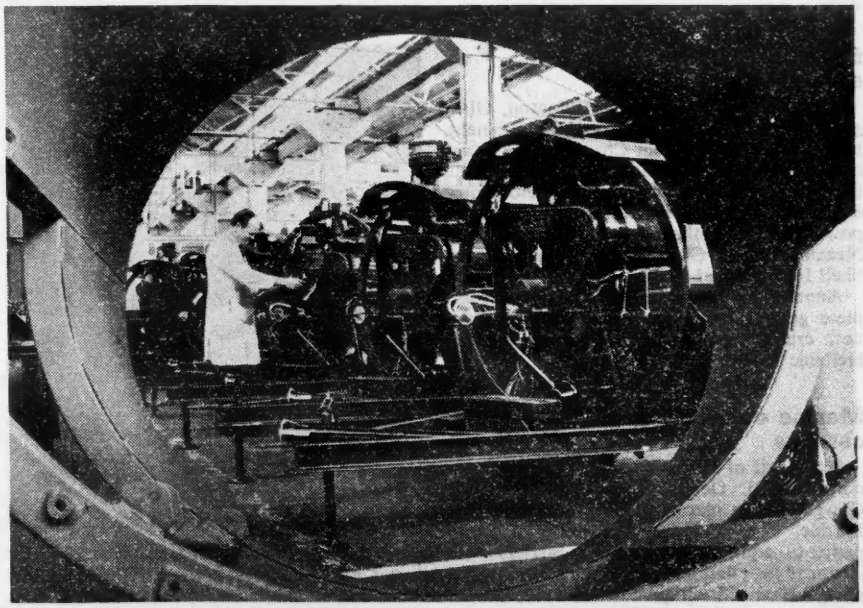
Beacon for Jamaica

An AGA PRB-30 sealed-beam beacon, supplied by the Navigational Aids Division of AGA (UK) Ltd., Brentford, has replaced a 72-year-old light on a dangerous promontory at Morant Point, the extreme eastern promontory of Jamaica. The new beacon is electrically operated and provides a light with an effective intensity of 290,000 cd. and a nominal range of 23 miles.

Order from Japan tops £700,000

The original £500,000 order for oil-filled electric radiators, which Dimplex won from Japan at the end of last year, has now been increased to £700,000.

Shipments began last March and Mr. Michael R. Evans, the regional export manager responsible for negotiating the order, is to visit Japan to finalise advertising plans with Dimplex distributors, Suita Trading Co. of Tokyo.



Lister crop-drying machines being prepared for shipping overseas at the Cinderford, Glos., works of R. A. Lister and Co. Ltd., a Hawker Siddeley Diesels company. These machines, to be used in Ecuador, Tanzania, Malaysia and Surinam, will enable rice to be harvested early. Controlled drying is claimed to give a higher quality crop.

Balers for Algeria

Against strong international competition, Bamfords Ltd., Uttoxeter, have obtained a contract for the supply of 300 wire-tying BL58 pick-up balers and spare parts from the Ministere de l'Agriculture et de la Reforme Agraire, Algeria. The order, valued at approximately £200,000, will be despatched before the end of September this year.

Fluid-heating units ordered

Two orders for Turbofin high-temperature fluid-heating units have been awarded to Beverley Chemical Engineering Co. Ltd., Billingshurst, Sussex.

One is for a heater with an output of 3 million Btu/h for use with a spooner dryer being supplied to Anneplas AB of Sweden. Beverley are acting as consultants for the system design and will also supply all ancillary equipment.

The second contract is for a 2 million Btu/h heater for use with a Proctor Dalglish stenter being supplied through Proctor Dalglish for an installation in Greece.

Portable desludging pump 'catches on'

An inquiry received by Plenty & Son Ltd., Newbury, Berks., has developed from a custom-built, 'one-off' unit into a highly successful standard model.

A petroleum company in the Middle East approached Plenty for a pump to desludge their crude oil tanks; this was necessary because there was insufficient power for side-entry mixers to be used.

After careful planning, Plenty supplied a unit consisting of a Plenpak 'F' pump, driven via a David Brown gearbox by an 80 hp Lister air-cooled diesel engine; the equipment was mounted on a fabricated steel skid.

The unit proved to be so efficient that a further four have been ordered by the same company, and inquiries are being received from other companies in the Middle East. So what started out as a specially designed unit for one customer has developed into a highly successful portable viscous fluid transfer pump. To date, 11 exactly similar units have been sold, and many more inquiries are being dealt with.

£30,000 order for galley equipment

Thomas Bishop Ltd., the Hillington, Glasgow, manufacturers of ship's galley equipment, have won an order from Chantier de l'Atlantique of France. Worth approximately £30,000, the order is for the complete galley and pantry equipment for four 75,000 dwt turbine-powered LPG tankers being built at the St. Nazair yards of Chantier de l'Atlantique for Shell International Marine.

Another order has been won for the complete galley and catering equipment for the new cruise vessel *Aquarius* being built for Hellenic Mediterranean Lines.

Marine equipment for bulk carriers

On behalf of H. Clarkson & Co. Ltd., London, J. & J. Denholm (Management) Ltd., Glasgow, have placed an order with Marconi Marine, a GEC-Marconi Electronics Company, to equip two new bulk carriers with identical installations of communications and navigational aid equipment. The 117,200-dwt vessels, newbuildings 224 and 226 at the Hiroshima yard of Mitsubishi Heavy Industries Ltd., Japan, are due for delivery in June 1972 and February 1973 respectively.

Muir-Hill Ltd., a Gloucester-based company of the Babcock & Wilcox Ltd. Group, announce that their large fleet of loading shovels in Greece is now being joined there by 161/25TD tractor trailer dumpers. Our illustration shows a 161/25TD working on road construction in Khalkidhiki, an undeveloped area in north-east Greece lying to the south of Thessaloniki. The actual location is at the extreme southern tip of Sithonia where access is gained only by travelling for approximately 40 miles over cart tracks, which often deteriorate into dried-up river beds and scrubland.

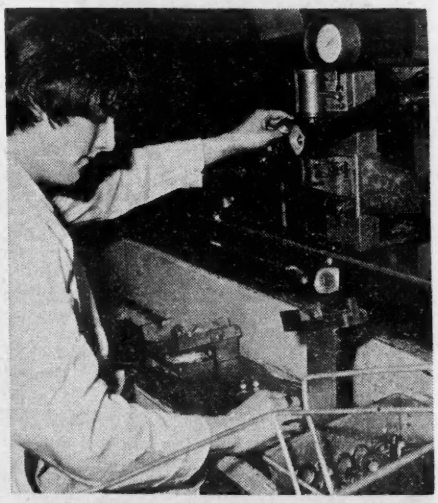
Aeronautical liferafts to Russia

RFD-GQ Ltd., manufacturers of inflatable safety and survival equipment, has been awarded a contract for the supply of 26-man aeronautical liferafts to Russia. The order, for 32 26U Mark 1C liferafts—complete with emergency packs—was received via a Russian trade delegation. The liferafts are to be supplied to Aeroflot and will be installed on Ilyushin IL-62s flying the transatlantic routes.

£600,000 Yugoslav contract

A contract worth £600,000 has been awarded to Smiths Industries by Energoinvest, a major Yugoslavian industrial company. Under the agreement, the British component and accessory manufacturer will supply specialised machinery for use in a new spark-plug factory at Sarajevo. Apart from equipping the new plant, Smiths Industries will also supply working drawings and supervisory staff to put the factory into production within the next two years.

The British company signed similar agreements with two other Eastern European countries—Poland in 1968 and the Soviet Union a year later.



Positioning a bearing into the steering gear rack housing tube assembly for the American Ford Pinto in the Assembly Department of Cam Gears Ltd. at Resolven, South Wales. Over 55,000 precision steel tubes are produced each month for this application by Tube Products Ltd., a TI Steel Tube Division company.

Carpet sales in 1970

The Federation of British Carpet Manufacturers reports that exports of tufted carpets totalled £13 million in 1970. In the United States tufted carpets have taken 90 per cent of of the market in less than 20 years.

Commonwealth markets remained the best customers, though their total share of the £16 million woven carpets exported declined from 46 to 41 per cent. Britain's second best customer group, the EFTA countries, also dropped slightly (£4.2 million compared with £4.5 million), but exports to the European Common Market countries rose by 8 per cent to £2.5 million, with particular improvements in Italy (up 53 per cent) and West Germany (up 29 per cent).

On the woven carpet position, over the past 10 years not only have exports to Western Europe (rising from 9 per cent to 43 per cent of total exports) overtaken those to the Commonwealth (a decline from 77 to 41 per cent), but the effects of cost inflation have also fallen almost entirely on exports to the Commonwealth.

The grand totals for exports of both woven and tufted carpets in 1970 are reported as £28.5 million—'reasonably satisfactory for a difficult year'.

During 1970 the Federation's export group and the Tufted Carpet Manufacturers' Association co-operated in an export drive which mounted a record number of 'joint venture' operations involving 40 manufacturers and covering Canada, France, Italy, West Germany, Finland and Sweden.

Significant order from America

A 'significant order' is to be found among export orders worth nearly £500,000, for boiler circulating pumps and motors, received in June by the Luton-based firm, Hayward Tyler & Co. Ltd., a member of Stone-Platt Industries. The order, worth £125,000, for four 950 hp wet stator boiler circulating pumps, is the first to be received from boiler maker Babcock & Wilcox (United States). The pumps are destined for the Ottertail Power Company's Big Stone power Station in South Dakota.

Another large American order received in June was for eight 900 hp wet stator boiler circulating pumps, worth some £250,000, for the Jim Bridger Power Station at Rock Springs, Wyoming. The station is being built by Combustion Engineering (United States), from whom the order was received, for the Pacific Power and Light Company and the Idaho Power Company.

An Italian company, Montecatini Edison, has placed an order worth over £50,000 for four 130 hp pumps for installation in India at Talcher and Ramogundan.

Trailers for 25-ton pile-driver

Hovertrailers International Ltd., Southampton, announce orders for two trailers for Holland. Of 15-ton capacity, they are for use by civil engineers on areas of reclaimed land. Designed to operate individually or as a pair, 'catamaran-style', they will transport a pile-driver weighing 25 tons. Delivery is scheduled for September.

Seat belts for Portugal

Irvin Great Britain Ltd., Letchworth, Herts., will have completed orders to Portugal for more than 100,000 car seat belts by the end of 1971. The Industrial Division of the company, based at Runcorn, Cheshire, won the orders against competition from France, Spain and Sweden in anticipation of legislation for the use of car seat belts in Portugal from July 1.

This announcement is sponsored by a leading Australian Bank on behalf of businessmen.

1 Australia is a developed country offering plenty of opportunities for foreign business and foreign investment.

2 Australia is one of the few countries in the world with a good industrial relations record.

3 Australia has limitless mineral resources. The rich get richer, and in the future Australia's going to be one of the richest countries in the world.

4 Australia has an abundance of space for building factories, for building offices and for spreading out in the future.

5 Australia has a steadily growing population. In the future her people are going to need more cars, more washing machines, more jobs, more everything.

6 Australia is part of the expanding Pacific market: Japan, New Zealand, the Western Seaboard of the United States and the developing countries of South-East Asia.

7 Australia is politically stable.

8 Australians speak your language. You'll be doing business with people you can understand.

9 Australia is a young country. She has all the resources for a continuing and increasing prosperity in the future.

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TRADE INFORMATION

In many cases further information on the notices published on these pages is available from the Department of Trade and Industry. The main branches concerned are: Commercial Relations and Exports (CRE) Division, DTI, 1 Victoria Street, London SW1H 0ET (Tel: 01-222 7877); and Export Services Division (ESD) and Export Data Branch (EDB), both at DTI, Export House, 50 Ludgate Hill, London EC4M 7HU (Tel: 01-248 5757). In each case, the relevant information source is indicated at the end of the notice by its initials (CRE, ESD or EDB) and the appropriate telephone extension number. In the Tariff and Trade Notices section countries are grouped by continents as far as possible; they are listed alphabetically on the contents page.

RENEWAL OF BENELUX TRADE AGREEMENTS: A notice published in the *Wereldmarkt* No. 25 of July 1, summarises the position of the Benelux Trade Agreements as at July 1, 1971. In some instances where trade agreements have already been renewed, details have been published in *Trade and Industry*.

Country	Validity of Agreements
Bulgaria	1. 1.1970-31.12.1974
Denmark	1.12.1970-30.11.1971
United Kingdom	1. 1.1971-31.12.1971
Hungary	1. 1.1967-31.12.1971
Israel	1. 9.1970-31. 8.1971
Japan	Entered into force on 10.4.1962
Morocco	1. 7.1971-30. 6.1972
Norway	1. 5.1971-30. 4.1972
Australia	1. 4.1971-31. 3.1972
Portugal	1. 9.1970-31. 9.1971
Romania	1. 1.1970-31.12.1974
Soviet Union	1. 1.1971-31.12.1974
Spain	15. 4.1971-14. 4.1972
Czechoslovakia	1. 1.1967-31.12.1971
Tunisia	1. 4.1971-31. 3.1972
Yugoslavia	1. 7.1971-30. 6.1972
Sweden	1. 3.1971-29. 2.1972
Switzerland	1. 4.1971-31. 3.1972

EDB 408, 288, 7175

EUROPEAN PATENT CONVENTION: A volume containing the second preliminary draft of this Convention, the first preliminary draft of the Implementing Regulations and the first preliminary draft of the Rules relating to Fees was available from July 15, 1971. A second volume containing the reports on these texts will be available at the end of July. Both contain the texts in English, French and German. A set consisting of both volumes may be purchased for 285 Luxembourg francs. Orders should be sent to: 'Centrale de vente des Publications des Communautés Européennes' at either 37, rue Glesener, Luxembourg or Case Postale 1003, Luxembourg/Gare. Remittances in respect of orders should be made payable to Postal Account No. CCP 191 10, Luxembourg, or to current bank account BILR 101/6830.

CZECHOSLOVAKIA AND ECUADOR: A three year Trade Agreement between Czechoslovakia and Ecuador was signed in Quito on June 28. In a separate Exchange of Notes both parties agreed that it was necessary to raise the level of trade between the two countries.

Reference was made to lines of credit offered to Ecuador by various Czechoslovak organisations who were willing to buy Ecuadorean products to enable the credit to be paid off; and to an offer by Kovo, the Czechoslovak exporting organisation, of a line of credit worth US$5 million for the purchase of specialised Czech equipment for hospitals, polyclinics, dispensaries, mobile surgeries, field hospitals, laboratories, and scientific instruments for teaching purposes. Kovo undertakes to buy Ecuadorean produce, particularly bananas in return to the total value of the line of credit.

In addition the Exchange of Notes offers Czechoslovakia collaboration with Ecuador in the form of technical and financial assistance in the field of geological surveys and the exploration, exploitation and manufacture of minerals. Discussions were held about the signing of a further Agreement in scientific and technical co-operation; negotiations to take place in Prague. An unofficial translation of the Trade Agreement is available to British exporters on application.

EDB Ext. 466, 467, 482

FRANCE AND NORTH VIETNAM: The French *Moniteur du Commerce Extérieur* of July 8 announced that a long term Trade Agreement between France and North Vietnam was signed in Paris on May 28, 1971. The Agreement is for the period January 1, 1970 to December 31, 1974, and aims at facilitating and developing trade between the two countries. A copy of the French announcement is available for inspection.

EDB Ext. 423, 408, 288

POLAND AND CHINA: Commercial talks between Poland and the Chinese People's Republic were concluded in Warsaw by the signing on May 31, of a trade and payments agreement for 1971. Under the agreement Poland will supply China with machine tools, diesel engines, ships, compressors, excavators, spare parts for machinery and metallurgical products. Imports from China will include raw materials such as tin, mercury, tungsten, tung oil, bristles, tea, meat, fruit juices, cinnamon, etc. Manufactured products will include silk fabrics, knitwear, towels and fur fabrics. No further information is available.

EDB Ext. 466, 467, 482

ECGD BACKS £10 MILLION THERMAL POWER PLANT FOR IRAN: The Export Credits Guarantee Department has signed a Financial Guarantee covering the financing of a £10 million contract gained by English Electric-AEI Turbine Generators Ltd., a member of GEC Power Engineering, for the supply of a complete 145 MW thermal power station to the Iran Power Generation and Transmission Company (Tavanir). Electrical equipment to be supplied by GEC Group Companies includes the generator transformer and unit transformers, 6.3 kV distribution boards for the auxiliaries in the power station and low voltage switchgear and multi-motor control centres, control and protective relays and all cables. Ancillary plant, including main steam pipework, water treatment plant and boiler feed pumps, and cooling water system including forced draught cooling towers, will be supplied by other British companies. The civil engineering design will be carried out by Bristol consultants, Parsons Brown. Civil works will be constructed by Mahak Co. of Tehran. The power station, which will take about three years to build, will be sited on the Karun River some five miles north of Ahwaz, the capital city of Khuzistan province, and the centre of the Iranian oilfield. It will meet current demands for power, consuming natural gas as primary fuel which is freely available from nearby production wells. The station design allows for future expansion to meet increasing industrial requirements for electricity in the area. A loan of approximately £7½ million to finance the major portion of the contract is being made available to the Plan Organisation of Iran by Lazard Brothers and Co. Ltd., acting on behalf of a syndicate of banks comprising Barclays Bank, Lloyds Bank, Midland Bank, National Westminster Bank, The Royal Bank of Scotland and Williams & Glyn's Bank. The loan is repayable over a period of 10 years from the date of commissioning.

LETTERS TO CYPRUS: Cyprus is now included in the destinations to which European letter-post rates apply, and letters will be sent by air at surface rates of postage. The new all-up letter rate for Cyprus is the same as that for Gibraltar and Malta.

TARIFF & TRADE NOTICES

European Communities

COMMON AGRICULTURAL AND FISHERIES POLICY: The texts of the following Regulations, Decisions and Directives which affect the various agricultural and fisheries sectors in the EEC have been published in the *Journal Officiel des Communautés Européennes*. The French texts of these Regulations, etc. may be seen on application.

Animal feedstuffs

Directive No. 71/250/CEE relates to fixing Community methods of sampling and analysis for the official control of animal feedstuffs (*Journal Officiel* No. L155 dated July 12, 1971).

Fish and fish products

Regulation (CEE) No. 1468/71 defines the conditions governing the granting of financial compensation for certain fish products (*Journal Officiel* No. L154 dated July 10, 1971).

Regulation (CEE) No. 1469/71 modifies the Dutch and Italian versions of Regulation (CEE) No. 697/71 relating to the disposal of certain fish products which have been subject to measures for regulating the market (*Journal Officiel* No. L154 dated July 10, 1971).

Regulation (CEE) No. 1470/71 modifies Regulation (CEE) No. 1424/71 extending the provisional import system for fish products originating in Morocco or Tunisia (*Journal Officiel* No. L154 dated July 10, 1971).

Cereals

Regulation (CEE) No. 1492/71 fixes the procedures and conditions for the taking over of cereals by intervention agencies (*Journal Officiel* No. L157 dated July 14, 1971).

Regulation (CEE) No. 1493/71 relates to the bonuses and refunds applicable on intervention, in the cereals sector (*Journal Officiel* No. L157 dated July 14, 1971).

Oils, fats and oil seeds

Regulation (CEE) No. 1477/71 modifies the Annex of Regulation No. 282/67/CEE relating to intervention procedure for oil seeds (*Journal Officiel* No. L156 dated July 13, 1971).

Regulation (CEE) No. 1479/71 relates to determining the intervention centres for oil seeds, other than the principal centres, and the derived intervention prices applicable thereto (*Journal Officiel* No. L156 dated July 13, 1971).

Regulation (CEE) No. 1480/71 modifies Regulation (CEE) No. 911/68 relating to certain procedures concerning aid for oil seeds (*Journal Officiel* No. L156 dated July 13, 1971).

Regulation (CEE) No. 1516/71 establishes a system of aid for cotton seeds (*Journal Officiel* No. L160 dated July 17, 1971).

Regulation (CEE) No. 1526/71 relates to the provision of special measures concerning exemption from levy certificates for olive oil used for the manufacture of certain preserves (*Journal Officiel* No. L160 dated July 17, 1971).

Regulation (CEE) No. 1471/71 completes Regulation (CEE) No. 1014/71 in so far as it concerns the countervailing amounts applicable in the fats sector, following the temporary setting up of floating exchange rates for the currencies of certain Member States (*Journal Officiel* No. L154 dated July 10, 1971).

Processed fruit and vegetables

Regulation (CEE) No. 1504/71 implements, in the sector for processed products with a fruit and vegetable base, Regulation (CEE) No. 1041/67 on rules for the application of export refunds on products coming under the common price system (*Journal Officiel* No. L158 dated July 15, 1971).

The lists of Tariff, Customs and Import Regulations changes in overseas countries published in this section of *Trade and Industry* sometimes contain words which are registered trade marks in the United Kingdom. So far as is practicable, all lists of goods are checked before publication from this point of view. Items which fall into this category are preceded by the letters rtm. Readers should note that this prefix signifies that the words are registered as trade marks in the United Kingdom but that in the present context are assumed to refer generally to products of the descriptions stated in brackets. While every attempt will be made to ensure that the scrutiny is complete, the lists may contain other words which are registered as trade marks in the United Kingdom or in other countries but which it has not been possible to identify.

Flax and hemp

Regulation (CEE) No. 1523/71 relates to the communications between Member States and the Commission in the flax and hemp sector (*Journal Officiel* No. L160 dated July 17, 1971).

Regulation (CEE) No. 1524/71 relates to the procedures applicable to aids for private storage of flax and hemp fibres (*Journal Officiel* No. L160 dated July 17, 1971).

Regulation (CEE) No. 1525/71 modifies Regulation (CEE) No. 1195/71 in so far as it concerns the closing date for submitting declarations in respect of fields sown with flax or hemp seeds (*Journal Officiel* No. L160 dated July 17, 1971).

Pigs and pigmeat

Regulation (CEE) No. 1515/71 relates to the non-fixing of additional amounts for the imports of live and slaughtered pigs as well as certain cut pieces of pork coming from Yugoslavia (*Journal Officiel* No. L159 dated July 16, 1971).

EDB Ext. 7174, 408

IMPORTS FROM NON-MEMBER COUNTRIES: Decision 71/239/CEE authorises Belgium, Luxembourg and Holland to exclude from Community treatment women's and children's cotton pyjamas (CCT No. 60.04 ex A) originating in Czechoslovakia and freely circulating in other Member States (*Journal Officiel* No. L155 dated July 12, 1971).

Decision 71/251/CEE authorises France to exclude from Community treatment, toys (CCT No. 97.03 ex B) originating in Hong Kong and freely circulating in the other Member States (*Journal Officiel* No. L155 dated July 12, 1971).

EDB Ext. 7174, 408

COMMON COMMERCIAL POLICY: Regulation (CEE) No. 1429/71 modifies Regulation (CEE) No. 1025/70 establishing a common system applicable to imports from third countries (*Journal Officiel* No. L151 dated July 7, 1971).

EDB Ext. 7174, 408

RULES OF COMPETITION—CORRECTION: *Trade and Industry* dated July 8, 1971 contained an announcement about Decision No. 71/224/CEE. Line 6 of paragraph 2 should be amended to read 'musical authors'.

CRE 2354/5

Italy

ADMINISTRATIVE CHARGES AND STATISTICAL DUES: The Italian *Gazzetta Ufficiale* of July 17 contains the text of Law 447 of June 24 which abolishes the administrative charges and statistical dues on imports with effect from August 1, 1971.

EDB Ext. 466, 467, 482

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Belgium

MODIFICATION OF TEMPORARY PRICE-FREEZE ON DOMESTIC ELECTRICAL GOODS: In a notice published in *Trade and Industry*, page 593 of June 16, 1971, details were given of a Decree published in *Moniteur Belge* of June 4 imposing a temporary price-freeze on domestic electrical equipment. The terms of the Decree have now been significantly modified by a 'contract de programme' between the Ministry of Economic Affairs and the electrical trade. Taking as the point of reference the level of prices in force on March 31, 1971, producers and importers are automatically allowed to pass on to their distributors any increase in their costs of production or importation, within a limit of 2 per cent during the year to May 31, 1972, provided that the increase is notified and justified to the Ministry of Economic Affairs on the day of its introduction. Distributors are to be free to fix their own prices, subject to the general supervision and control of the Inspection des Prix. The agreement is to run for a trial period of four months, which began on June 1, 1971, and then for a further period of a year. In return for these concessions, the trade is to abolish the present system of retail prices fixed by the producer or importer; all prices quoted will in future be net, and the consumer is to be better advised of his rights.

EDB Ext. 288, 408, 423, 7175

Switzerland

VARIABLE IMPORT LEVIES—ALTERATIONS IN TARIFF RATES: *Trade and Industry* of January 6 published details of a Swiss system of variable import levies which replaced duties on certain EFTA goods. From July 1 to December 31, 1971, the following rates will replace those printed in *Trade and Industry* of January 6.

Tariff No.	Description	Rate of levy
BN ex 17.04	Sugar confectionery, not containing cocoa (heading 17.04.30):	(*a*) 45.00 (*b*) 26.00 (*c*) 13.00 (*d*) 21.00 } Swiss francs per 100 kg. gross
BN ex 19.08	Biscuits, wafers, rusks, cakes and Danish pastry: Unsweetened, without cocoa or chocolate:	(*a*) 20.00 (*b*) 28.00 (*c*) 9.00 (*d*) 23.00 } Swiss francs per 100 kg. gross

EDB Ext. 460, 461

Norway

PRICE CONTROL: The Norwegian Ministry of Wages and Prices recently announced a new regulation concerning price control which became effective from July 12. Importers, in the same manner as other traders, may now make additions to their selling prices corresponding to the increase in their cost prices. This should meet British exporters' various objections to the price freeze regulations. In effect prices are no longer frozen but profit margins remain controlled.

EDB Ext. 458, 459, 461

Sweden

ABOLITION OF CERTAIN TAXES: The Swedish Authorities have announced the following changes in indirect taxation. The tax on furskins and manufactures thereof (BN Nos. ex 42.03, 43.02, 43.03, ex 60.05, ex 61.01, ex 61.02 and ex 65.03-65.06) will be abolished as from January 1, 1972.

The sales tax on knotted carpets, pearls and precious stones, articles of precious metals etc. and articles of pearls and precious stones (BN Nos. 58.01, ex 71.01, 71.02, 71.03, 71.12, 71.13, 71.14, 71.15 and ex 91.01) will equally be abolished as from July 1, 1972.

EDB Ext. 458, 459, 461

Iceland

TARIFF CONCESSIONS: Details of a list of Icelandic duty concessions on specific materials falling within tariff headings 34.02.09 and 38.19.19 were published on page 619 of *Trade and Industry* for March 17. The Icelandic Ministry of Finance have recently added to the list further items under these headings. Persons engaged in industry or a craft trade may import any of the listed products at a reduced duty of 30 per cent providing they state on their import declaration that the materials will be used solely as raw materials for industrial products. The materials affected by the concessions are listed under the foreign brand names of the products at present being used by local industrialists, but other items may be added on application by the user. The item NANSA SSA (BN 34.02.09) has been deleted from the original list.

EDB Ext. 458, 459, 461

Spain

CUSTOMS TARIFF—PETROCHEMICAL PRODUCTS: Notice was given in *Trade and Industry* dated May 5 (page 264) of temporary amendments to the Spanish customs tariff on petrochemical products, valid until June 30, 1971. The Spanish *State Gazette* of July 19 announced that the period of validity has been extended to September 30, 1971.

EDB Ext. 462

Yugoslavia

REDUCTION OF IMPORT DUTY ON SPECIFIC AERODROME EQUIPMENT: It was announced in the Yugoslav *Official Gazette* that with effect from April 23, 1971, the 12 per cent duty on specific aerodrome equipment was reduced to 10 per cent. Tariff numbers affected are 84.11/2, 84.12/3, 84.21/3, 85.01/1a-2, 87.02/2b, 87.03/5, 87.03/11 and 87.14/5.

EDB Ext. 420, 475

ABOLITION OF IMPORT DUTY ON ELECTRONIC COMPUTERS: It has been announced in the Yugoslav *Official Gazette* that with effect from April 23, 1971 the 15 per cent duty on electronic computers and machines for preparing data for electronic computers and the 25 per cent duty on tapes and discs for electronic computers was abolished.

EDB Ext. 420, 475

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REDUCTION OF IMPORT DUTY FOR SPECIFIC EQUIPMENT FOR RADIO-DIFFUSION CORPORATIONS: The import duty of 12 per cent on the following equipment imported for the needs of radio-diffusion corporations was reduced to 10 per cent on April 23, 1971.

Automatic generators, stationary or mobile for constant power supply; radio-telegraph and radio-telephone transmitting and receiving apparatus, excepting radio-diffusion transmitters for short, medium and long waves; radio-television and film reporting vehicles for sound and image; cinematographic cameras, projectors, sound reproducers and sound recorders and any combination of these articles except TV and cine projectors for film of 16 or 35 mm.; television apparatus for reproduction of images and sound, magnetic and suchlike. Light bulbs for all projector apparatus and reflector light bulb of over 1 kW. are free. No further information is available.

EDB Ext. 420, 475

REDUCTION OF IMPORT DUTY ON SPECIFIC EQUIPMENT FOR THE NEEDS OF FORESTRY, WOOD, CELLULOSE AND PAPER INDUSTRIES: It has been announced in the Yugoslav *Official Gazette* that the 12 per cent customs duty on the following tariff numbers was reduced to 10 per cent on April 23, 1971: 84.01/4; 84.02/1, 2 and 4; 84.09/3 and 4; 84.10/3 and 7; 84.12/2 and 3; 84.16/1, 2 and 3; 84.17/1b, d, e, f, g and j; 84.18/2a-1; 84.18/2b; 84.19/2; 84.20/1; 84.21/2 and 3; 84.22/5c-e; 84.23/11 and 12; 84.31; 84.33; 84.40/1j; 84.45/2c-2; 84.45/2c-4; 84.45/2d; 84.47/2-12; 84.49/3; 84.59/2f, i and m; 85.11/2 and 3; 87.01/1b; 87.14/4 and 5; 90.22/3; and 90.24.

EDB Ext. 420, 475

REDUCTION OF IMPORT DUTIES ON CERTAIN PRODUCTS: It has been announced in the Yugoslav *Official Gazette* that, with effect from April 23, 1971, the duties on the following goods were reduced as follows:

84.15/1a and b; 86.02/3; 86.03/1 and 2; 86.05/1a-c, e and h; 86.07/1a-h and j; 86.09/1; 87.02/2a; 87.02/3a-c2, were reduced to 15 per cent.

84.15/2-3; 84.62/1-2; 85.15/1a and 2a-b; 86.05/1d, f and g; 87.01/1a and 2; 87.02/2b, 2d and 3d; 87.03/10; 87.04/2b-d; were reduced to 20 per cent.

84.41/1a, 2a-3 and 4; 84.52/1, were reduced to 25 per cent.

87.03/4 and 5 to 10 per cent; 86.02/4 to 12 per cent; 86.04/1-4 to 19 per cent; 84.41/1b to 23 per cent; 84.51/1 to 24 per cent; 84.51/2-3 to 26 per cent; 87.02/c4-5 and f to 28 per cent; 87.04/a to 35 per cent; and 87.02/1a to 40 per cent.

EDB Ext. 420, 475

Iran

IMPORT OF BUTTER: The Iranian Ministry of Economy announces that as from July 1, 1971, until further notice, the import deposit for butter will be reduced from 100 per cent to 15 per cent. No further information is available.

EDB Ext. 420, 475

Seen here with Mr. T. McGann, Marketing Manager of Pye TVT, is Chief A. Y. Eke, Commissioner of Finance of the Mid-West State of Nigeria during a recent visit to the Cambridge company's works. The Chief is pictured on a tour of the production facilities taking a great interest in a telecine equipment of a kind used to project film for TV broadcasts. About 50 per cent of Pye TVT's production is earmarked for export.

Morocco

IMPORT REGULATIONS: The Moroccan Ministry of Commerce has recently announced in Notice to Importers No. 106 that the following item has been transferred from List C (prohibited list of imports) to List B (imports requiring licence).

Tariff heading	Description
Ex 46.02	Paper for plaiting

This legislation took effect from June 9.

EDB Ext. 420, 475

SOFT DRINK REGULATIONS—USE OF ETHYL-PYROCARBONATE: The Moroccan *Bulletin Officiel* of June 9 announced new regulations concerning the use of ethyl-pyrocarbonate in soft drinks. The main stipulations which must be complied with are:

(*a*) the purity of the preservative must not be below 98 per cent.
(*b*) the amount used must not exceed 200 mgr. per litre.

EDB Ext. 420, 475

Sierra Leone

CUSTOMS TARIFF AMENDMENT: Public Notice No. 40 of 1971, The Customs Tariff Act, 1968, published in the Sierra Leone

(Continued on next page)

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SIERRA LEONE

Continued

Official Gazette of June 28 amends the First and Second Schedules to the Customs Tariff Act with effect from June 26 as follows:

1. Part A of the First Schedule to the Customs Tariff Act, 1968, is hereby amended by varying the existing rates of duty under Tariff Numbers 03.01 and 22.03 to read respectively:

Tariff No.	Tariff description	Rate of duty	Statistical No.	Unit of quantity
03.01	Fish, fresh (live or dead), chilled or frozen	the hund. lb. Le2.00	031-100	cwt.
22.03	Beer made from malt:			
	A. Stout or porter	the gall. Le2.00	112-310	gall.
	B. Other beer and ale	the gall. Le3.02	112-390	gall.

2. Part 2 of the Second Schedule to the Customs Tariff Act is hereby amended by replacing Item 2.5 (*c*) by the following new item:

(*c*) Fish and crustacea fresh or chilled, taken within territorial waters by canoes or by ships and boats registered in Sierra Leone.

EDB Ext. 471/2/3

Angola

HARBOUR DUES: Information has been received from the Port of Luanda authorities that harbour dues in Angola are now being levied on the basis of cubic metres. British exporters should therefore ensure that bills of lading and other shipping documents are marked to show the volume (in cubic metres) as well as the weight (in kilos and fractions of kilos).

EDB Ext. 460, 459

Somalia

IMPORT CONTROL: By Presidential Decree dated June 5 and published in the *Official Gazette* of June 10, the under-mentioned products may now only be imported into Somalia by Government controlled National Commercial Agency:

Animal and vegetable oils and fats
Rice
Cement
Bleached and unbleached cotton cloth
Wheat flour.

ESD Ext. 471/2/3

South Vietnam

IMPORT DEPOSITS: Details of commodities authorised for import into Vietnam during the third quarter of 1971 showing the rate of import deposit applicable to each commodity are now available in the Department of Trade and Industry.

EDB Ext. 420, 475

Malaysia

SECOND FIVE-YEAR PLAN: The Second Malaysian Plan (1971-1975), details of which were published in the June 23 issue of *Trade and Industry* (page 656), was presented to the House of Representatives by the Prime Minister, Tun Razak, On July 12.

CRE Ext. 2143

A LIBRARY FOR EXPORTERS

Foreign trade statistics and other economic statistics from almost every country in the world are available for reference in the Department of Trade and Industry Statistics and Market Intelligence Library at Export House, 50 Ludgate Hill, London, EC4M 7HU. A modern well-equipped library of over 85,000 volumes, it has a reading room for visitors, and provides a document-copying service. There are trade directories covering 150 countries, and an expanding collection of trade catalogues of overseas manufacturers. The library opens from 9 to 5.30, Mondays to Fridays (Tel. 01-248 5757 ext. 368 or Telex No. 886143).

CUSTOMS DUTIES: The Malaysian *Government Gazette* dated June 24, 1971, published the Customs Duties (Amendment) (No. 8) Order, 1971 which amends the first schedule to the Customs Duties Order 1968 by the deletion of tariff heading 85.18 800 and the insertion in their appropriate places of the following:

Heading No.	Description	Unit of quantity	Federation Common Tariff
85.18	Electrical capacitors (condensers) fixed variable: Other		
810	of not over 8 mfd (microfarad)	No.	25% or $1 dollar whichever is the higher (P)
890	of over 8 mfd (microfarad)	No.	Nil

The Malaysian *Government Gazette* dated July 1, 1971, published the Customs Duties (Amendment) (No. 9) Order, 1971, which amends the first schedule to the Customs Duties Order 1968 by the deletion of tariff heading 85.06 420 and the insertion in their appropriate places of the following:

Heading No.	Description	Unit of quantity	West Malaysia		Sabah		Sarawak	
			Full	Pref.	Full	Pref.	Full	Pref.
85.06	Electro mechanical domestic appliances, with self-contained electric motor: Fans: table,							
420	of a blade diameter not exceeding 8 inches	No.	45% or $25.00 whichever is the higher (P)		45% or $25.00 whichever is the higher		45% or $25.00 whichever is the higher	
421	other	No.	45% or $25.00 whichever is the higher (P)		45% or $25.00 whichever is the higher		45% or $25.00 whichever is the higher	
430	pedestal and wall-bracket	No.	45% or $25.00 whichever is the higher (P)		45% or $25.00 whichever is the higher		45% or $25.00 whichever is the higher	

(P) = extends to Penang.

EDB Ext. 468/9

New Zealand

EMERGENCY PROTECTION AUTHORITY REPORT: Copies of the following New Zealand Emergency Protection Authority report have been received and are available from the Commercial Relations and Exports Division.

Tariff item	Description
97.04.09	Children's playing cards

CRE Ext. 2321

EMERGENCY PROTECTION AUTHORITY—NAILS: The New Zealand Minister of Industries and Commerce has referred to the Emergency Protection Authority for inquiry and report the question whether it is necessary that protective action, by means of temporary additional duties or temporary restriction of importation (or by a combination of both) be taken in respect of copper, brass and silicone bronze nails. Details of the tariff items, under which the above mentioned goods are dutiable, are given below.

Tariff item	Unit	British preferential	Most favoured nation	General
Ex 74.14.03	cwt.	25%*	45%*	50%*
Ex 74.14.09	cwt.	Free	20%	25%

* Or such lower rate of duty as the Minister may in any case direct.

The Emergency Protection Authority is required to report to the Minister by August 13, 1971. In the short time available for investigation United Kingdom interests wishing to make their views known to the Emergency Protection Authority will no doubt get in touch with their Agents or the Director of the British Trade

(Continued on next page)

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NEW ZEALAND—*continued*

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CRE Ext. 2321

CUSTOMS TARIFF CHANGES: The New Zealand Government has issued Customs Tariff Amendment Order No. 6 (1971) which came into force on July 1 amending certain items in the New Zealand Customs Tariff. The Chapter concerned is 32.07.

EDB Ext. 401, 468, 469

United States

DOCK STRIKES: All the West Coast ports of the United States are still strike bound. Over one hundred ships are lying idle along the coastline and redirected traffic to Vancouver in Canada and Ensenada in Mexico is steadily building up. Latest local opinion shows no sign of an early settlement and it seems likely that the strike may continue into October, thereby coinciding with the possible East and Gulf ports strike later this year.

Long range speculation about the likelihood of the East and Gulf ports coming out at the beginning of October is varied, but the possibility of a nationwide dock strike (or at least an East and Gulf ports strike) in the United States at any time after October 1, 1971 cannot be ignored by British exporters. In the event of a nationwide strike the President may decide that it gives him sufficient reason to invoke the 80 day 'cooling off' period.

CRE Ext. 2647

'BUY-AMERICAN' PREFERENCE ON 'HAND AND MEASURING TOOLS' FOR THE GSA: *Trade and Industry* of January 6 published details of an increase to 50 per cent of the level of preference given to United States manufacturers of 'hand and measuring tools' when bidding for contracts for these items with the United States General Services Administration. This level of preference passed the United States Congress in the form of an amendment to an Appropriations Act and as such had to be renewed at the end of the financial year. Legislation has just been passed in the United States which will renew the 50 per cent preference for a further year.

CRE Ext. 2647

PENNSYLVANIA INTRODUCES 'BUY AMERICAN' BILL: A 'Buy-American' bill has been introduced into the State legislature of Pennsylvania, which if passed, would mean that only United States steel products will be considered for State contracts.

CRE Ext. 2647

PROPOSALS FOR REGULATION OF WINE BOTTLE SIZES: Present United States Federal Regulations provide that wine should be bottled in standard containers containing prescribed quantities of wine. Exemption is made for imported wines in the original containers in which they entered the customs custody. Proposals have now been made by United States domestic wine interests that this exemption should be withdrawn.

CRE Ext. 3364

In many cases further information on the notices published on these pages is available from the Department of Trade and Industry. The main branches concerned are: Commercial Relations and Exports (CRE) Division, DTI, 1 Victoria Street, London SW1H 0ET (Tel: 01-222 7877); and Export Services Division (ESD) and Export Data Branch (EDB), both at DTI, Export House, 50 Ludgate Hill, London EC4M 7HU (Tel: 01-248 5757). In each case, the relevant information source is indicated at the end of the notice by its initials (CRE, ESD or EDB) and the appropriate telephone extension number. In the Tariff and Trade Notices section countries are grouped by continents as far as possible; they are listed alphabetically on the contents page.

CONTROL OF AIR POLLUTION FROM MOTOR VEHICLES: *Trade and Industry* on April 10, 1971 gave notice of proposed exhaust emission standards applicable to 1975 and later model year light duty vehicles. After consideration of comments received a number of amendments have been made to the proposals. These became effective on July 2, 1971.

OXIDES OF NITROGEN: The environmental protection agency have issued oxides of nitrogen exhaust emission standards and test procedures applicable to new 1973 light duty vehicles (Ref. FR.2.7.71).

CERTIFICATION OF LOW EMISSION VEHICLES: Under Section 212 of the Clean Air Act, a low Emission Vehicle Certification Board was established. Regulations and proceedings to be adopted by the Board for the approval of low emission vehicles have now been announced (FR.29.6.71).

CRE Ext. 2397

Colombia

IMPORT BAN LIFTED: Colombian Customs Policy Council Resolution No. 09 of May 4, 1971 transfers the following item from the Prohibited List to the Prior Import Licence List:

Tariff No.	Description
49.11.D	Other printed matter

Finance for technology

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SALES TAX RAISED: In Circular No. 00055/SDG/V of May 17, 1971 the Colombian General Directorate of Customs and the General Directorate of National Taxes raised the Sales Tax on imported goods as follows:

Old rate % Selling price	new rate % Selling price
Free	Free
3%	4%
8%	10%
15%	25%

Cars, station wagons, television sets, cigarettes and gas or electric industrial ovens when originating in and consigned from member countries of the Latin American Free Trade Area pay 15 per cent instead of the 25 per cent charged on these items from non-members.

EDB Ext. 474, 476, 7312

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IMPORT DUTIES DOWN: Colombian Customs Policy Council by Resolutions 004 of April 20, 007 and 008 of June 1, and 010 of June 16, 1971 lowered the import duty in respect of part or all of the following tariff numbers:

04.05 21.07 29.15 38.19 56.01 56.02 56.04 58.05 70.21 73.15 76.04 84.41 96.02

PRIOR DEPOSITS LOWERED: Colombian Monetary Board Resolution No. 40 of May 13, 1971 has reduced the prior deposit of 130 per cent f.o.b. value to 100 per cent and the 70 per cent f.o.b. value prior deposit to 50 per cent, with the exception of tariff number 98.07 on which the prior deposit remains at 70 per cent.

EDB Ext. 474, 476, 7312

Guyana

ELECTRICAL EQUIPMENT: The production of electricity in Guyana is now on a mixed frequency basis of 50 cycles/sec. and 60 cycles/sec. Guyana intends to introduce a unified national frequency of 60 cycles/sec. In view of this it should be noted that importers have been requested, during the interim period, to import only dual electrical equipment intended for use on 50 cycles/sec. systems; that is of 50-60 cycles/sec. (50-60 Hz.), so that equipment can be readily adapted when the new system is introduced.

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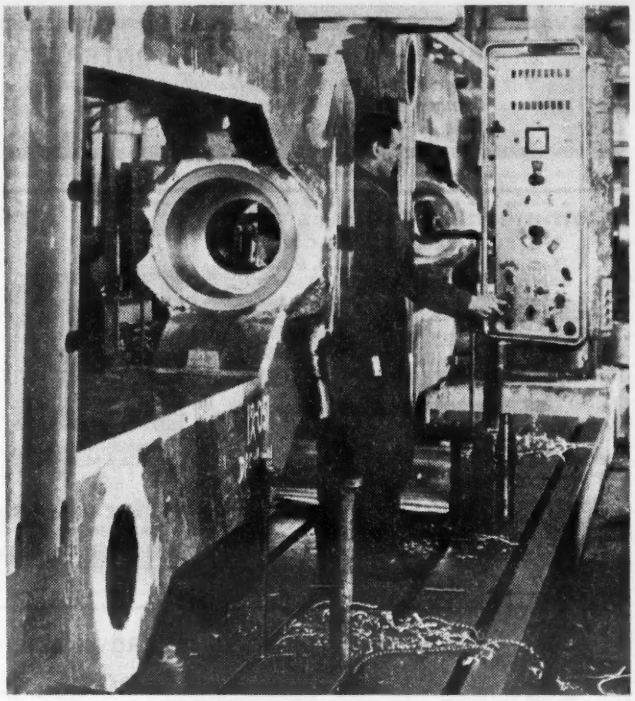

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PERFORMING RIGHT TRIBUNAL

NOTICE IS HEREBY GIVEN pursuant to Rule 5 of the Performing Right Tribunal Rules 1965 of an application to the Tribunal under Section 27(3) of the Copyright Act 1956 by Tuckton Golf Course Limited of Stour Road, Christchurch, Hampshire.

THE APPLICATION concerns a dispute as regards the terms and conditions under which Phonographic Performance Limited of Evelyn House, 62 Oxford Street, London, W.1, is prepared to grant a licence to authorise the playing of gramophone records at a discotheque known as Barbarella's Discotheque at Stour Road, Christchurch, which is owned and operated by the said Tuckton Golf Course Limited.

Phonographic Performance Limited is willing to grant a licence for the use of records on condition that employment opportunities are offered to live musicians on one evening per week during the Winter season and on not less than three evenings per week during the Summer season.

Tuckton Golf Course Limited contends that the conditions sought to be imposed by Phonographic Performance Limited are unreasonable and ought not to be imposed and asks the Tribunal for an Order (i) entitling Tuckton Golf Course Limited to a licence to play gramophone records in the said Barbarella's Discotheque thereby causing the said records to be heard in public, at a reasonable royalty and not subject to any condition obliging Tuckton's Golf Course Limited to employ live musicians at the said discotheque and (ii) for costs.

Any organisation or person wishing to be made party to the proceedings must make application for the purpose in the manner prescribed by the Performing Right Tribunal Rules 1965 not later than the 20th day of August 1971.

The Performing Right Tribunal
Room 105
25 Southampton Buildings
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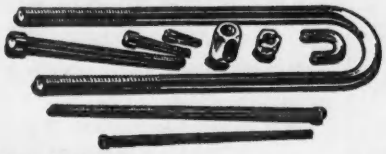

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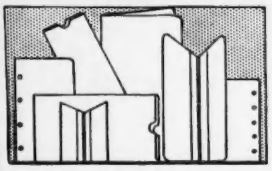

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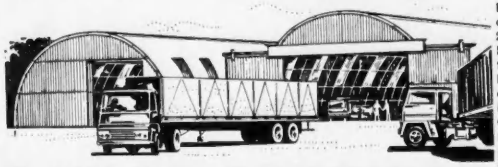

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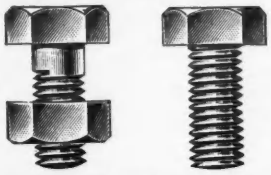

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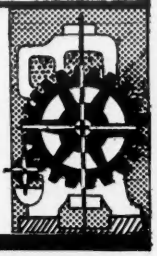

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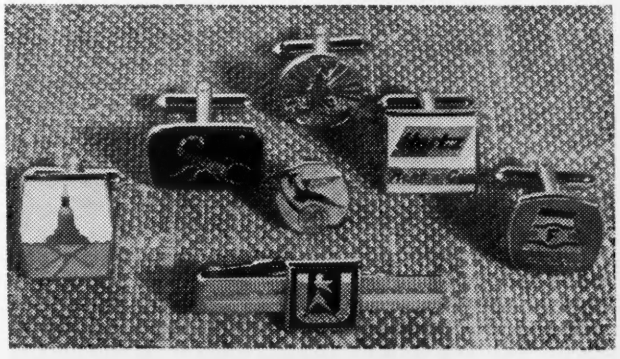

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Applications should be submitted as soon as possible before the closing date 31 October 1971. Official forms and an explanatory booklet are available from: The Office of The Queen's Award to Industry, 1 Victoria Street, London SW1H 0ET. Tel: 01-222 2277

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